

MIT204 EUROTLX POST TRADE FIX GATEWAY (5.0)

Issue 7.0 | JANUARY 2021

Contents

- Post Trade Gateway (FIX 5.0) Error! Bookmark not defined.**
- 1 Introduction 5**
 - 1.1 Purpose 5**
 - 1.2 Readership 6**
 - 1.3 Document series..... 6**
 - 1.4 Document history 8**
 - 1.5 Enquiries 11**
- 2 Service description 12**
 - 2.1 Connection configuration..... 12**
 - 2.1.1 Real-time connections12
 - 2.1.2 Query-based service.....12
 - 2.2 Trade Information 17**
 - 2.2.1 Identifiers17
 - 2.2.2 Trade, Execution and Order Identifiers.....19
 - 2.3 Trade cancels 21**
 - 2.3.1 Main Fields set in the TCRs sent for Cancelled Trades21
 - 2.4 Trade amendments..... 21**
 - 2.5 Timestamps and dates..... 21**
 - 2.6 Encryption 22**
- 3 Connectivity 23**
 - 3.1 CompIDs..... 23**
 - 3.1.1 Passwords23
 - 3.2 Production IP addresses and ports..... 23**
 - 3.3 FIX gateway failover and Disaster Recovery Site 23**
 - 3.4 Message Rate Throttling 25**
- 4 FIX connections and sessions 26**
 - 4.1 Establishing a FIX connection..... 26**
 - 4.2 Maintaining a FIX session 29**
 - 4.2.1 Message Sequence Numbers29
 - 4.2.2 Heartbeats30
 - 4.2.3 Increasing Expected Sequence Number.....31
 - 4.3 Terminating a FIX connection..... 31**
 - 4.4 Re-establishing a FIX session 32**

4.4.1 Resetting Sequence Numbers: Starting a new FIX session.....	33
5 Recovery	34
5.1 Resend Requests	34
5.2 Possible duplicates	34
5.3 Possible resends.....	34
5.4 Transmission of missed messages	35
5.4.1 Application sequencing and recovery	35
6 Supported message types.....	38
6.1 Administrative Messages.....	38
6.2 Application Messages Trade Feed	38
6.2.1 Trade Feed Client-Initiated	38
6.2.2 Trade Feed Server-Initiated.....	39
6.3 Application messages: Other (server initiated)	39
6.4 Variations from the FIX Protocol	39
7 Message formats	40
7.1 Message header and trailer	40
7.1.1 Message Header.....	40
7.1.2 Message Trailer.....	43
7.2 Administrative messages.....	44
7.2.1 Logon	44
7.2.2 Logout	45
7.2.3 Heartbeat.....	46
7.2.4 Test Request	46
7.2.5 Resend Request	46
7.2.6 Reject.....	47
7.2.7 Sequence Reset	50
7.3 Application messages: Trade Feed.....	51
7.3.1 Trade Capture Report Request (Client Initiated)	51
7.3.2 Application Message Request (Client Initiated)	54
7.3.3 Trade Capture Report (Server Initiated)	54
7.3.4 Trade Capture Report Request Ack (Server Initiated).....	66
7.3.5 Application Message Request Ack (Server Initiated).....	67
7.4 Application Messages: Other	68
7.4.1 Business Message Reject.....	68

8 Reject codes 69
 8.1 Trade Capture Report Ack..... 69
 8.2 Business Message Reject..... 70

1 INTRODUCTION

EuroTLX has provided a post trade gateway that will enable member firms to receive real-time information on executed trades. This interface can not be used to submit orders or quotes or receive market data.

The interface is a point-to-point service based on the technology and industry standards TCP/IP, FIXT and FIX. The session and application event models and messages are based on versions 1.1 and 5.0 (Service Pack 2) of the FIXT and FIX protocols respectively.

1.1 Purpose

The purpose of this document is to provide a technical description of the post trade gateway available on the Millennium Exchange platform.

All the technical documents should be read in conjunction with the Rules and Guide to Parameters of EuroTLX Market.

Rules of EuroTLX

The Rules Book of EuroTLX Market is available at the following links:

<https://www.borsaitaliana.it/borsaitaliana/regolamenti/eurotlx/eurotlx.en.htm>

Trading Services webpage

More details of the Exchange's Trading Systems, including where this document and the *Millennium Exchange Business Parameters for BIT* document will be found following go-live can be seen at:

<https://www.borsaitaliana.it/borsaitaliana/gestione-mercati/migrazionemillenniumit-mit/millenniumitmigration.en.htm>

1.2 Readership

This document outlines how to connect to the post trade gateway and the detailed message types and fields used.

When read in conjunction with the other Millennium Exchange guides, it is intended that these documents provide all of the details directly connected EuroTLX customers require to develop to the new services.

1.3 Document series

This document is part of a series of documents providing a holistic view of full trading and information services available from the EuroTLX post the migration to Millennium Exchange.

The current series of documents are set out below:

- **Trading**
 - MIT201 EuroTLX – Guide to New Trading System
 - MIT202 EuroTLX – FIX Trading Gateway (FIX 5.0)
 - MIT203 EuroTLX – Native Trading Gateway Specification
 - **MIT204 EuroTLX – Post Trade Gateway (FIX 5.0) Specification (this document)**
 - MIT205 EuroTLX – Drop Copy Gateway (FIX 5.0) Specification

- **Market Data**
 - MIT305 EuroTLX – Markets Reference Data
 - MIT306 EuroTLX – Instrument Currency
 - MIT308 EuroTLX - Trading Calendars
 - MIT309 EuroTLX - RFQ Market Maker Reference Data
 - EuroTLX – ANA File Service – Basic
 - EuroTLX – ANA File Service – Enriched

- **Report Reconciliation Service**
 - MIT601 EuroTLX – Report Reconciliation Service

- **Other**
 - MIT501 EuroTLX- Guide to Testing Services
 - MIT701 EuroTLX – Connectivity Specification
 - EuroTLX – Members File Service
 - EuroTLX – RCG File Service
 - EuroTLX – Market Statistics - TLX_Listino.txt File Service

This series principally covers non-regulatory information.

The latest version of this document series can be found at the following links:

<https://www.borsaitaliana.it/borsaitaliana/gestione-mercati/migrazionemillenniumit-mit/millenniumitmigration.en.htm>

1.4 Document history

This document has been through the following iterations:

Issue	Date	Description
1.0	January 2014	First issue of this document published via the EuroTLX's website and distributed to customers.
1.1	May 2014	Updated version of this document published via the EuroTLX's website and distributed to customers. The changes are applied in the following sections: -7.3.3
1.2	November 2014	Updated version of this document published via the EuroTLX's website and distributed to customers. The changes are applied in the following sections: - 3.3, 4.1, 5.4.1.1, 7.3.1, 7, 7.3.3
1.3	April 2015	Updated version of this document published via the EuroTLX's website and distributed to customers. The changes are applied in the following sections: - 1.3, 7.3.3
2.0	July 2016	Updated version of this document published via the EuroTLX's website and distributed to customers. The changes are applied in the following

		<p>sections:</p> <ul style="list-style-type: none"> - 1.1, 1.3, 1.5, 2.1.2.1.2, 2.2, 3.4, 4.1, 4.2.2, 7.1.1, 7.3.1, 7.3.3, 8.1.
2.1	July 2016	<p>Updated version of this document published via the EuroTLX's website and distributed to customers.</p> <p>The changes are applied in the following sections:</p> <ul style="list-style-type: none"> - 7.3.1, 7.3.3.
2.2	August 2016	<p>Updated version of this document published via the EuroTLX's website and distributed to customers.</p> <p>The changes are applied in the following sections:</p> <ul style="list-style-type: none"> - 4.1
2.3	September 2016	<p>Updated version of this document published via the EuroTLX's website and distributed to customers.</p> <p>The changes are applied in the following sections:</p> <p>7.3.3</p>
3.0	March 2017	<p>Updated version of this document published via the EuroTLX's website and distributed to customers.</p> <p>The changes are applied in the following sections:</p> <p>2.1.2, 2.1.2.1, 2.1.2.1.2, 2.2, 2.2.1, 2.2.1.1, 2.2.2, 2.3, 2.3.1, 2.4, 3.1.1, 3.3, 3.4, 4.1, 4.2, 4.2.1, 4.2.2, 4.3, 4.4, 4.4.1.1, 5.4.1.4, 6.2.2, 7.1.2, 7.2.1, 7.2.2, 7.2.6, 7.3.1, 7.3.3,</p>
3.1	May 2017	<p>Updated version of this document published via the EuroTLX's website and distributed to</p>

		<p>customers.</p> <p>The changes are applied in the following sections:</p> <p>7.3.1, 7.3.3,</p>
3.2	July 2017	<p>Updated version of this document published via the EuroTLX's website and distributed to customers.</p> <p>The changes are applied in the following sections:</p> <p>7.3.3.</p>
4.0	June 2018	<p>Updated version of this document published via the EuroTLX's website and distributed to customers.</p> <p>The changes are applied in the following sections:</p> <p>2.3.1, 2.4, 2.5.</p>
4.1	August 2018	<p>Updated version of this document published via the EuroTLX's website and distributed to customers.</p> <p>The changes are applied in the following sections: 7.3.3</p>
5.0	August 2019	<p>According to the new Hardware Refresh, updated version published via the Borsa Italiana's website and distributed to customers.</p> <p>Changed Sections: 3.3</p>
6.0	February 2020	<p>Updated version of this document published via the Borsa Italiana's website and distributed to customers.</p> <p>The changes are applied in the following sections: 7.3.3</p>

6.1	August 2020	Updated version of this document published via the Borsa Italiana's website and distributed to customers. The changes are applied in the following sections: 7.3.3
7.0	January 2021	Updated version of this document published via the Borsa Italiana's website and distributed to customers. The changes are applied in the following sections: 7.3.3

In subsequent issues, where amendments have been made to the previous version, these changes will be identified using a series of red side bars as illustrated opposite and highlighting the changes in Red.

1.5 Enquiries

Please contact the Client and Market Services if you have any functional questions about the Millennium Exchange services outlined in this document. The Client and Market Services can be contacted at:

Client and Market Services Team

- Customer Relationship Management
 - +39 02 72 42 6 512
 - **Clients-Services@borsaitaliana.it**
- Market Access (configurations, enablements, conformance tests, etc.)
 - +39 02 72 42 6 668
 - **market-access@borsaitaliana.it**
- Client Support (customer support desk)
 - Toll Free: 0080026772000 - From mobile: +39 02 45411399
 - **Client-Support@borsaitaliana.it**

2 SERVICE DESCRIPTION

Clients will receive real-time information on the trades executed on the Trading along with notifications of any trade cancel. The details of trades executed on previous trading days are not available via this service.

2.1 Connection configuration

A member firm connection will be configured by EuroTLX to receive all of its trades. If required, a member firm could be configured to only receive trades for selected users and securities.

For the purpose of redundancy, the service supports the configuration of multiple post trade connections to send the same information on the activity of the selected firms/trader groups.

2.1.1 Real-time connections

A real-time client will receive the details of each eligible trade immediately after it is executed. Please refer to **Section 5** for a description of how the trades executed during the time a real-time client is disconnected from the server may be recovered.

2.1.2 Query-based service

A query-based client will not receive any real-time notifications of its eligible trades. Such clients are expected to request the server for the details of trades as and when they are needed as outlined below.

Clients can specify using the Trade Capture Report Request whether they wish to receive the details of all eligible trades or details of a selected set of trades belonging to a set of instruments, a specified party, trade type or order.

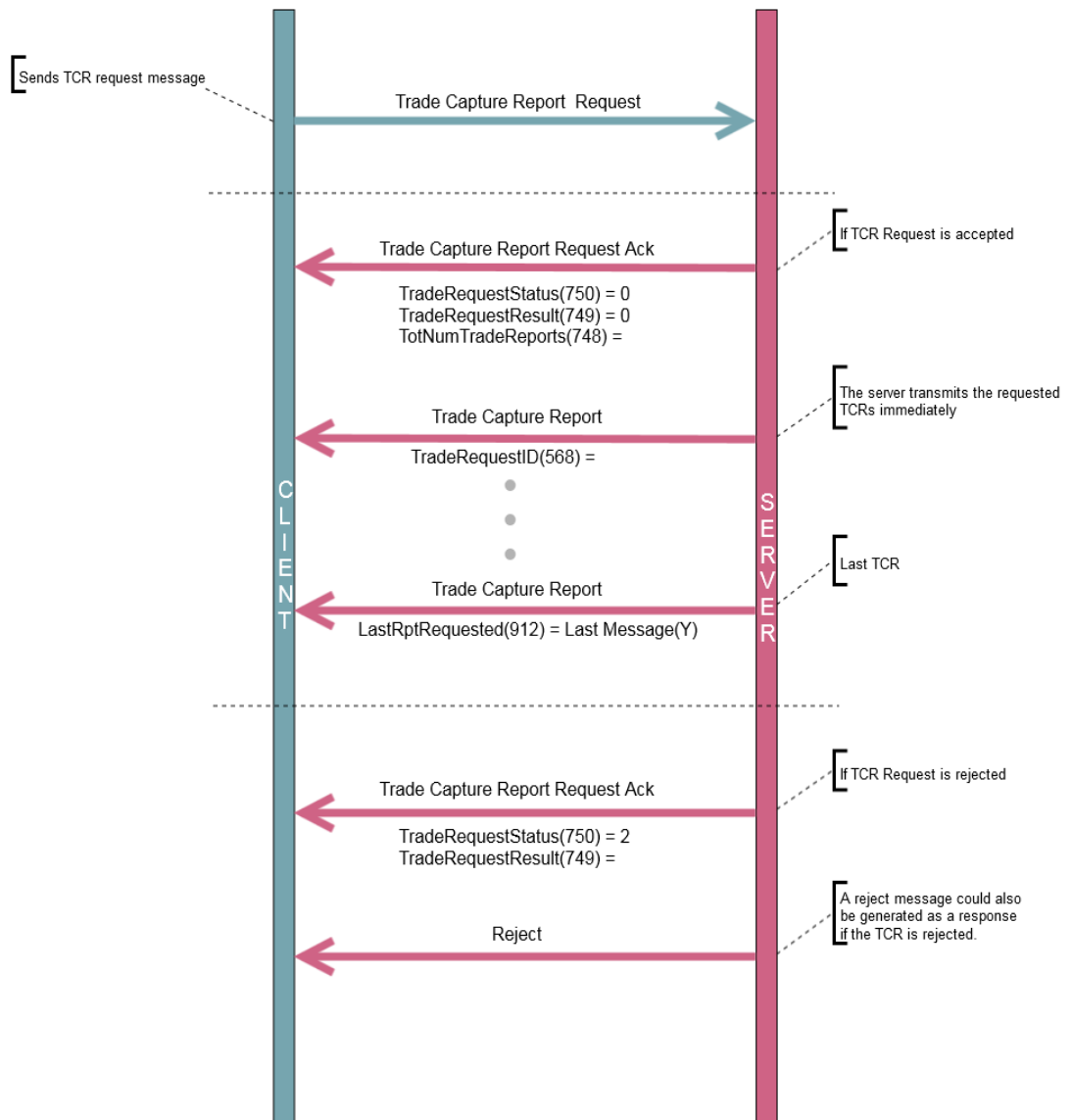
If a particular Trade Capture Report Request contains multiple criteria (e.g. SecurityID and Account), the server will treat it as a request for trades that match all of the specified criteria.

As per the current system architecture, the sequence of Trade Capture Reports disseminated based on a Trade Capture Report Request will be that of the sequence of submission of the trades, provided the request is for trades constrained to a single partition. If the request is for trades belonging to multiple partitions, the sequence of Trade Capture Reports disseminated may not be in the sequence of original submission.

The system limits the number of Trade Capture Report Requests a Comp ID can send within a day at a pre-defined level.

2.1.2.1 TRADE CAPTURE REPORT REQUESTS

A client may use the **Trade Capture Report Request** message to request the details of all eligible trades or those that meet certain criteria. The server will respond with a Trade Capture Report Request Ack.



2.1.2.2 REQUEST FOR ALL TRADES

The Trade Capture Report Request should include a TradeRequestType (569) of All Trades (0) if the client wishes to request the details of all eligible trades.

2.1.2.3 REQUEST FOR SELECTED TRADES

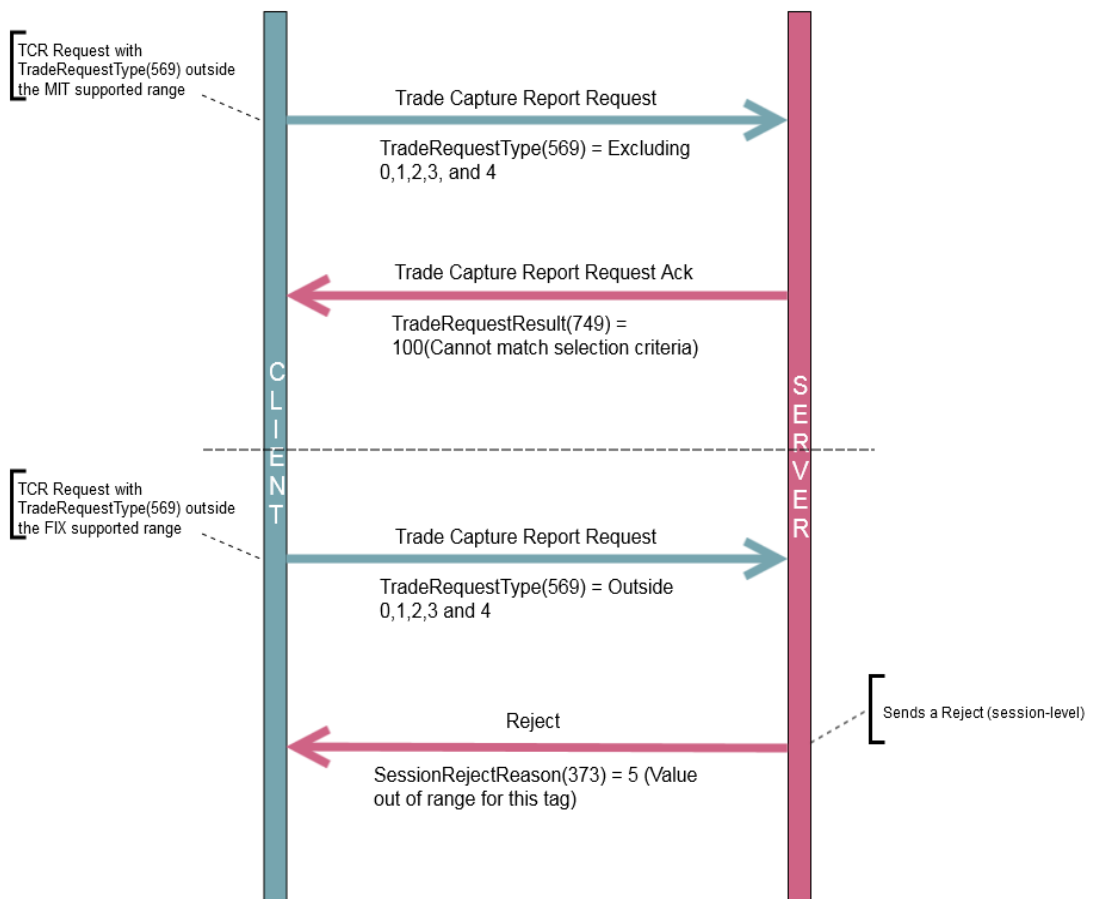
The Trade Capture Report Request should include a TradeRequestType (569) of Trades Matching Specified Criteria (1) if the client wishes to request the details of eligible trades for a selected set of instruments or for a specified party, trade type or order.

Field	Description
SecurityID (48)	May be used if the request relates to a single instrument.
SecurityIDSource (22)	May be used if the request relates to a single instrument.
SecurityAltID (455)	May be used if the request relates to a single instrument. Will refer to the instrument's identification number (i.e. ISIN).
ExecType (150)	may be used if the request is limited to cancelled trades, or trades that have not been cancelled.
UnderlyingSymbol (311)	May be used in the case of warrants and fixed income instruments respectively.
Issuer (106)	May also be used in the case of warrants and fixed income instruments respectively.
SecurityType (167)	May be used if the request relates to a particular group of instruments
ProductComplex (1227)	May be used if the request relates to a particular group of instruments
MatchType (574)	May be used if the request relates to particular types of trades (e.g. on-book trades, RFQ).
PartyID block	Indicates the parties (i.e. executing firm, clearing organization, counterparty firm, trader group, trader id etc.), if any, the request relates to. A Trade Capture Report Request may include multiple PartyIDs.
Side (54)	May be used if the client only wishes trades for a particular side (i.e. buy, sell or sell short).
ClOrdID (11)	Used if the request is for trades related to a specific order.

Field	Description
OrderID (37)	Used if the request is for trades related to a specific order.
TrdType (828)	May be used if the request relates to regular trade or RFQ Trades.

If a particular Trade Capture Report Request contains multiple criteria (e.g. SecurityID and Account), the server will treat it as a request for trades that match all of the specified criteria. If no trades match the specified criteria, the server will reject the request with a TradeRequest Result (749) of Cannot Match Selection Criteria (100).

As per the current system architecture, the sequence of Trade Capture Reports disseminated based on a Trade Capture Report Request will be that of the sequence of submission of the trades, provided the request is for trades constrained to a single partition. If the request is for trades belonging to multiple partitions, the sequence of Trade Capture Reports disseminated may not be in the sequence of original submission.



2.2 Trade Information

The FIX Trade Capture Report message is utilized by the service to transmit the details of each trade. A separate Trade Capture Report will be sent for each side of a trade.

Field	Value
TradeHandlingInstr (1123)	Trade Confirmation (0)
ExecType (150)	Trade (F)
MatchStatus (573)	Matched (0)
TradeReportTransType (487)	New (0)
TradeReportType (856)	Submit (0)

Each message will contain both basic and value added information on the trade (e.g. price quantity, consideration, settlement date, etc.), the security (e.g. ISIN) and the parties (e.g. trading firm). It will also contain information related to the computation of execution fees (e.g. maker or taker, trade type, etc.).

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2.2.1 Identifiers

The Trade Capture Report message is utilised by the server to transmit the details of each trade. A separate Trade Capture Report will be sent for each side of a trade. Each message will contain both basic and value added information on the trade (e.g. price quantity, consideration), the security and any involved parties. Where relevant, it will contain information related to the computation of execution fees (e.g. maker or taker).

2.2.1.1 PARTY IDENTIFIERS

ID	Description	PartyRole (452)
Executing Firm	The trading firm the executed order was submitted under.	PartyRole (452) = 1 PartyID (448)
Clearing Organization	Clearing member for the particular trade.	PartyRole (452) = 24 PartyID (448)
Trader Group	The unit of the firm the executed order was submitted under.	PartyRole (452) = 76 PartyID (448)
Trader ID	Trader ID of the trader who executed the trade.	PartyRole (452) = 100 PartyID (448)
Counterparty Firm	Counterparty of the trade. For cleared trades, the CCP will be stamped as the counterparty.	PartyRole (452) = 17
Client ID	Identifier of the client of the order/quote or RFQ	3
Investment Decision Maker	Identifier of the investment decision relevant to the order/quote or RFQ	122
Executing Trader	Identifier who makes the execution decision of the order/quote or RFQ	12

2.2.2 Trade, Execution and Order Identifiers

ID	Description
Trade Report ID	The TradeReportID (571) of each Trade Capture Report is unique across trading days. The Trade Capture Reports published to report the two sides of a trade will contain different TradeReportIDs. A Trade Capture Report published to notify a client of a trade cancellation includes the TradeReportID of the message that was published to report the trade in the TradeReportRefID (572) field.
Trade ID	The Trade Capture Reports published to report the two sides of a particular trade will contain the same TradeID (1003). Trade IDs are unique across trading days. A Trade Capture Report published to notify a client of a trade cancellation includes the TradeID (1003) of the relevant trade.
Trade Link ID	The Trade Capture Reports published for a single transaction (e.g. the execution of an incoming order against multiple passive orders, etc.) will contain the same TradeLinkID (820). Trade Link IDs are unique across trading days. A Trade Capture Report published to notify a client of a trade cancellation includes the TradeLinkID (820) of the trade.
Execution ID	<p>A Trade Capture Report will contain the Execution ID of the Execution Report message sent by the Order Management Gateway to report the execution of an order to the firm that submitted it. This Execution ID will be specified in the SideExecID (1427) field of the Trade Capture Report.</p> <p>The Execution Reports published to report the two sides of an execution will contain different Execution IDs which are unique across trading days.</p>
Order ID	<p>The matching system's order identification number for the executed order will be included in the OrderID (37) field of the Trade Capture Report.</p> <p>Order IDs are unique across trading days. In terms of the FIX protocol, unlike ClOrdID (11) which requires a chaining through Cancel/Replace Requests and Cancel Requests, the</p>

ID	Description
	OrderID (37) of an order will remain constant throughout its life.
Client Order IDs	<p>In the case of orders, the ClOrdID (11) included in the Trade Capture Report will be that specified when the order was submitted. An order's ClOrdID (11) will be updated each time an Order Cancel/Replace Request or an Order Cancel Request is accepted.</p> <p>In the case of quotes, the ClOrdID (11) included in the Trade Capture Report will be the QuoteMsgID (1166) of the executed quote if it was submitted as a single quote or its QuoteID (117) if it was submitted as a mass quote.</p> <p>For RFQ trades and trade cancellations, the ClOrdID (11) included in the Trade Capture Report will be the QuoteReqID (131) of the executed RFQ or QuoteMsgID (1166) of the executed quote.</p>

2.3 Trade cancels

Market Supervision may cancel a trade. The server will transmit **Trade Capture Reports** to the relevant clients to notify them of a trade cancellation. All on book trade cancellations get immediately reported on the market data feed.

2.3.1 Main Fields set in the TCRs sent for Cancelled Trades

In the case of a trade cancellation, the following fields will be set:

- ExecType (150) = Trade Cancel (H)
- MatchStatus (573) = Unmatched (1).
- TradeHandlingInstr (1123) = Trade Confirmation (0)
- If the trade is cancelled by market operations, TradeReportType (856) = Trade Break (7)
- TradeReportTransType (487) = Cancel (1)

2.4 Trade amendments

Market Supervision may amend a trade. The server will transmit Trade Capture Reports to the relevant clients to notify them of a trade amendment. All on book trade amendments get immediately reported on the market data feed.

2.5 Timestamps and dates

Following timestamps used in server generated messages should be in UTC and in the YYYYMMDD-HH:MM:SS.uuuuuu format. For client generated messages both YYYYMMDD-HH:MM:SS.uuuuuu and YYYYMMDD-HH:MM:SS.sss formats are accepted.

- SendingTime (52)
- OrigSendingTime (122)
- TransactTime (60)

SendingTime is only validated when processing the Login message.

For all other messages it is not mandatory to enter milliseconds in the SendingTime (52) tag.

Following timestamps used in messages should be in UTC and in the YYYYMMDD-HH:MM:SS format.

- ExpireTime (126)

ExpireDate (432) should be in the YYYYMMDD format and specified in the local date for the server (i.e. not in UTC).

2.6 Encryption

The encryption of messages between the client and server is not supported.

3 CONNECTIVITY

3.1 CompIDs

The CompID of each client must be registered with EuroTLX before FIX communications can begin. A single client may have multiple connections to the server (i.e. multiple FIX sessions, each with its own CompID).

The CompID of the server is PTGW. The messages sent to the server should contain the CompID assigned to the client in the field SenderCompID (49) and CompID of the server in the field TargetCompID (56). The messages sent from the server to the client will contain CompID of the server in the field SenderCompID (49) and the CompID assigned to the client in the field TargetCompID (56).

3.1.1 Passwords

Each new CompID will be assigned a password on registration. Clients are strongly encouraged to change the password to one of their choosing via the Logon message. The status of the new password (i.e. whether it is accepted or rejected) will be specified in the SessionStatus (1409) field of the Logon message sent by the server to confirm the establishment of a FIX connection. The new password will, if accepted, be effective for subsequent logins.

3.2 Production IP addresses and ports

The IP addresses and ports for the post trade gateway will be published in a separate configuration document.

3.3 FIX gateway failover and Disaster Recovery Site

FIX gateway failover

In the event of failure of a single FIX Gateway participants should connect / logon via the corresponding Alternate gateway. Any attempt to logon to the Alternate Gateway outside of any failure event will be refused.

In case of unexpected disconnection from the FIX Gateway participants should attempt to re-connect a total of three times, with 3 seconds between each attempt, before attempting to connect to the Alternate Gateway.

Once connected to the Alternate Gateways, the FIX Gateway will increment outbound (to the participant) message sequence numbers by a configurable amount (customer inbound sequence number incremented to 5000) to ensure that any messages in-flight at the time of failure can be recovered.

Following log-on to the Alternate Gateway any Execution Reports or Trade Capture Reports generated by the system whilst participants are disconnected (including deletions due to Cancel on Disconnect) will automatically be re-sent. Should the number of messages that need to be re-sent exceed 2000 then only the last 2000 messages will be re-sent. Customers will be required to send a Resend Request to recover the remaining messages.

After six failed connection attempts (three on each Gateway) this may indicate a serious issue and the Exchange should be contacted for guidance.

Please contact the Service Desk team (service-desk@borsaitaliana.it, Toll Free: 0080026772000, from mobile +390245411399).

Disaster Recovery Site

Millennium Exchange operates in cold standby mode. In the event of total loss of the Primary Site London Stock Exchange will activate the Disaster Recovery Site. This procedure is expected to take in the order of 2 hours.

In the event of disaster recovery only trades that have been sent to participants via a Trade Capture Report (TCR) from the Post Trade Gateway will be guaranteed to have been sent to clearing and settlement (if applicable).

Participants should disregard any trades for which only the Execution Report (and not the TCR) has been sent.

Once the Disaster Recovery Site is active then all order and quote books will be cancelled and the trading system will be re-started.

Participants should note that no updated Execution Reports will be sent identifying those orders cancelled together with the activation of the DR site.

Following the Disaster Recovery invocation, participants should connect to the Disaster Recovery Gateways.

All instruments will be reinstated in an auction call state. Instruments for which this is not applicable will be reinstated to a Pre-Mandatory Trading Session.

Following recovery to the Disaster Recovery Site it is recommended for all participants to:

- execute an Own Trade Download to confirm which trades have been sent to clearing and settlement
- execute an Own Order Book Download to confirm that no orders are currently active

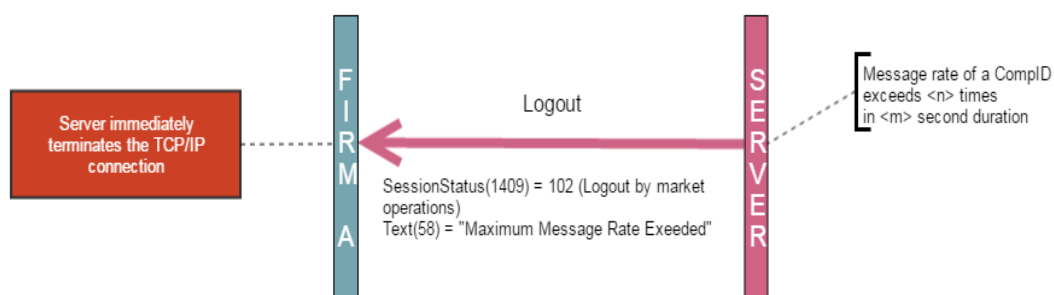
Once the Disaster Recovery Site is active all FIX message sequence numbers will be reset to 1 on the Exchange FIX Gateways. Customers must also reset their outgoing sequence numbers to 1 before reconnecting to Disaster Recovery Site.

3.4 Message Rate Throttling

Message rate throttling is a scheme for throttling message traffic where each CompID is only permitted to submit up to a specified number of messages per second. Additional information will be provided in a separate configuration document.

Every message that exceeds the maximum rate of a CompID will be rejected via a Business Message Reject. Such a message will include a BusinessRejectReason (380) of Other (0) and an indication that the rejection was due to throttling in the Text (58) field.

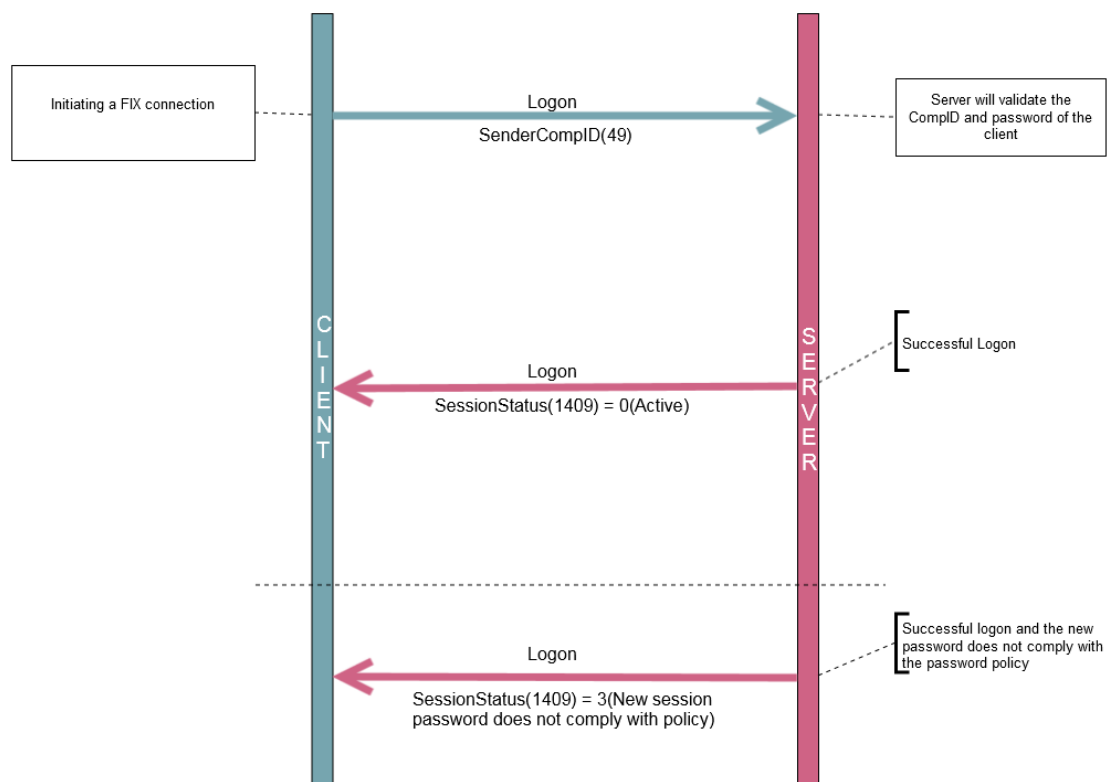
A CompID will be disconnected by the server if its message rate exceeds its maximum rate more than 5 times in any 30 second duration. In such a case, the server will transmit a Logout message. The Logout message will be sent with SessionStatus(1409) = 102 (Logout by market operations) and Text = "Maximum Message Rate Exceeded". After a considerable time (5 seconds) following the Logout message, the server will terminate the TCP/IP connection.



4 FIX CONNECTIONS AND SESSIONS

4.1 Establishing a FIX connection

Each client will use the assigned IP address and port to establish a TCP/IP session with the server.



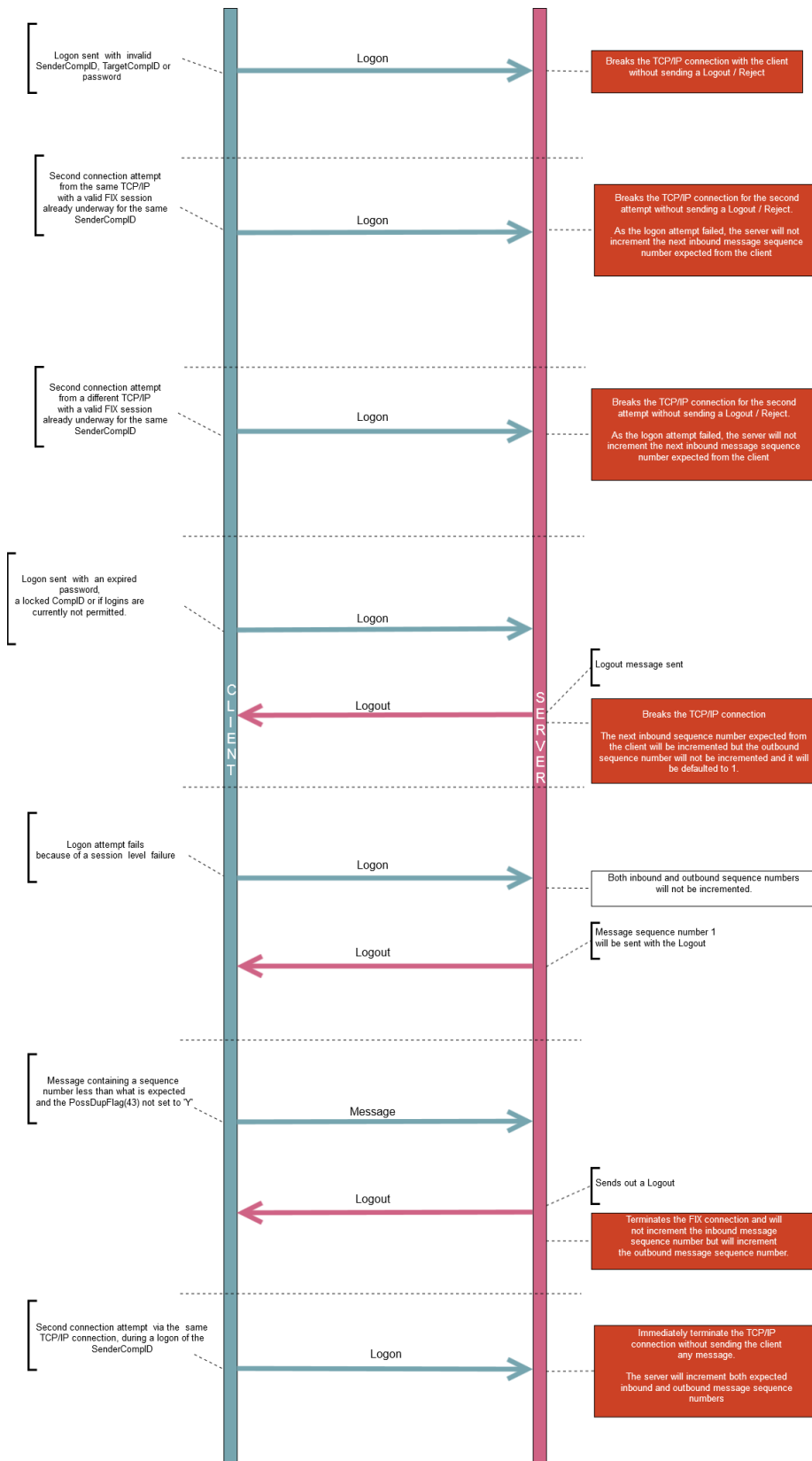
The server will break the TCP/IP connection if messages are received before the exchange of Logons.

When the client sends a logon with a sequence number higher than expected by the FIX Gateway, the FIX gateway will send a Resend Request. Once the response/s to the Resend Request is processed by the FIX Gateway, the FIX Gateway would send a Test

Request to make sure both the client and server is in sync before sending out any missed or new application messages.

Once a response to the Logon message has been received, a client can start sending additional messages to the server. System will start sending the client any new or missed Application Messages immediately after the Logon Reply is sent.

Logon failures and connection terminations



The outbound sequence number will be 1 only if ResetSeqNumFlag (141) is set to 'Y' in the Logon message sent by the client. If the ResetSeqNumFlag is set to 'N', there is no assurance that the MsgSeqNum(34) of the reply message to Logon will be 1.

Rapid login/logouts

A protection mechanism has been implemented to protect the gateway from rapid login/logouts. Login/logouts happening within a period of 50 ms will be considered as a rapid login/logout. If a user reaches 100 number of rapid login/logouts within 600 seconds, any subsequent login/logouts will be delayed by a variable time period which is computed based on the number of rapid login/logouts. This will reset after 600 seconds given that the user does not perform any rapid login/logouts within this period.

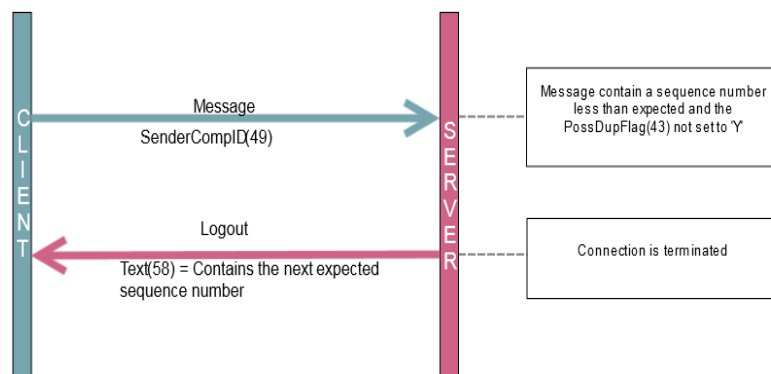
4.2 Maintaining a FIX session

A FIX session is maintained using Message Sequence Numbers and Heartbeat messages

4.2.1 Message Sequence Numbers

As outlined in the FIX protocol, the client and server will each maintain a separate and independent set of incoming and outgoing message sequence numbers. Sequence numbers should be initialised to 1 (one) at the start of the FIX session and be incremented throughout the session.

Monitoring sequence numbers will enable parties to identify and react to missed messages and to gracefully synchronize applications when reconnecting during a FIX session.



If the server receives a message that cannot be processed (malformed message) it will not respond to that message and will not increment the sequence number maintained. In such a scenario, when the next readable message is received by the server it will detect a sequence gap between the client and server. The server will send a Resend Request to the client requesting for messages from the sequence number the server is maintaining. If the client does not correct the malformed message to a readable one, the above event model will be repeated until there is no sequence gap.

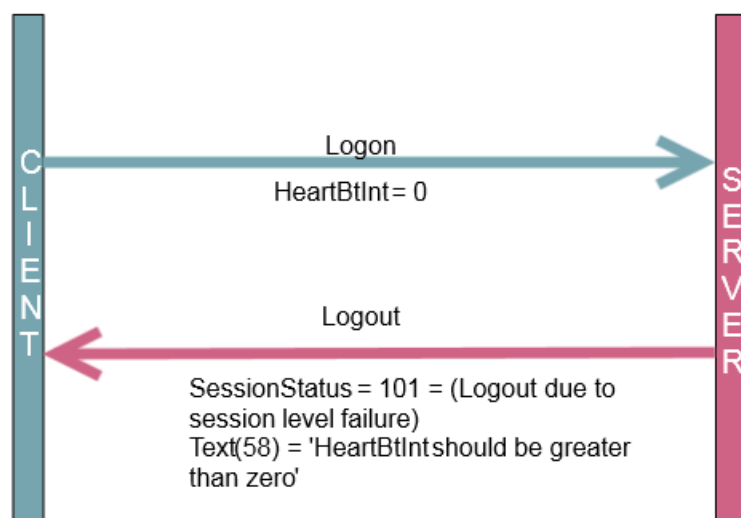
4.2.2 Heartbeats

The client and server will use the **Heartbeat** message to exercise the communication line during periods of inactivity and to verify that the interfaces at each end are available. The heartbeat interval will be the HeartBtInt (108) specified in the client's Logon message. The server will send a Heartbeat message anytime it has not transmitted a message for the heartbeat interval. The client is expected to employ the same logic.

As a safety mechanism, the system will not allow the user to login if the HeartBtInt is set to 0. The following behaviour is expected if the server receives a Logon with the HeartBtInt set to 0.

If the server detects inactivity for a period longer than the heartbeat interval plus a reasonable transmission time (a total inactivity period of three heartbeat intervals), it will send a Test Request message to force a Heartbeat from the client. If a response to the Test Request is not received by a reasonable transmission time (three heartbeat intervals), the server will send a Logout and break the TCP/IP connection with the client.

For the server to reset the heartbeat missed count, the message received in response to the Test Request message should be a heartbeat message. However it's not obligatory for client's heartbeat message to have the same Test Request ID as the respective Test Request message. Even if the value is different or if the field does not contain a value, the heartbeat missed count will be reset.



The client is expected to employ similar logic if inactivity is detected on the part of the server.

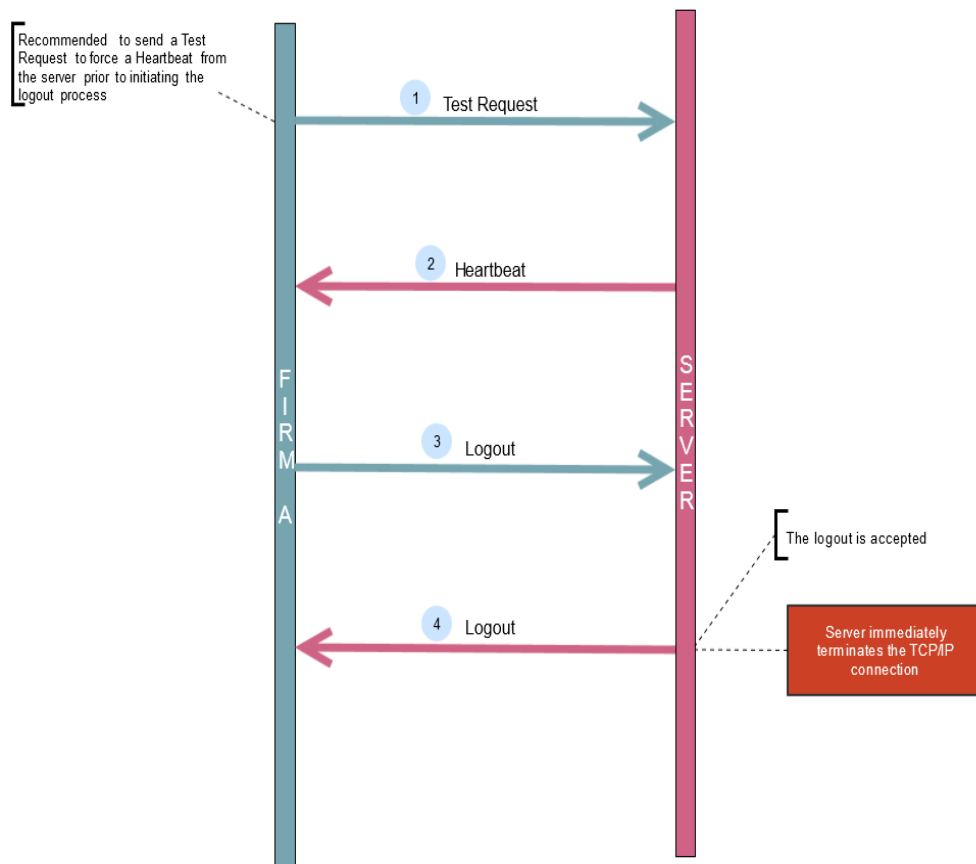
4.2.3 Increasing Expected Sequence Number

The client or server may use the **Sequence Reset** message in Gap Fill mode if it wishes to increase the expected incoming sequence number of the other party.

The client or server may also use the Sequence Reset message in Sequence Reset mode if it wishes to increase the expected incoming sequence number of the other party. The Sequence Reset mode should only be used to recover from an emergency situation. It should not be relied upon as a regular practice.

4.3 Terminating a FIX connection

The client is expected to terminate each FIX connection at the end of each trading day before the server shuts down. The client will terminate a connection by sending the Logout message. The server will respond with a Logout to confirm the termination. The client will then break the TCP/IP connection with the server.



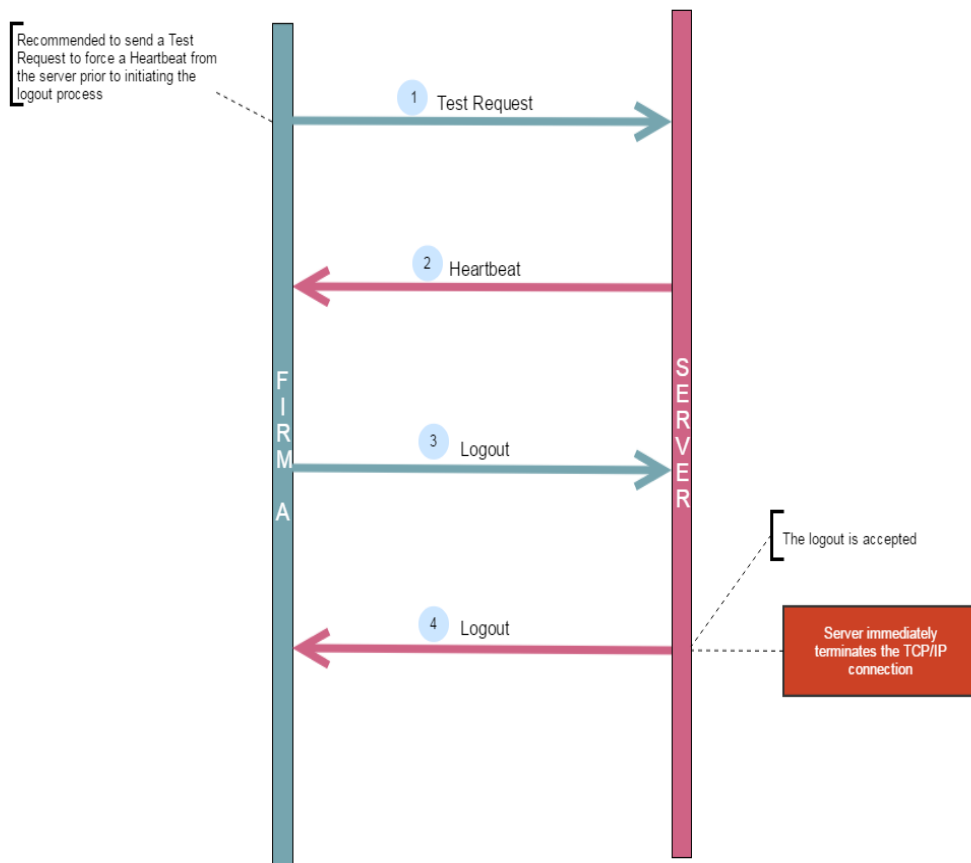
As recommended in the FIXT protocol, clients are advised to transmit a *Test Request*, to force a *Heartbeat* from the server, before initiating the logout process.

All open TCP/IP connections will be terminated by the server when it shuts down (a Logout will be sent). Under exceptional circumstances the server may initiate the termination of a connection during the trading day by sending the Logout message.

If, during the exchange of Logout messages, the client or server detects a sequence gap, it should send a Resend Request.

4.4 Re-establishing a FIX session

If a FIX connection is terminated during the trading day it may be re-established via an exchange of Logon messages. Once the FIX session is re-established, the FIX Gateway would also send a Test Request to confirm if the sequence numbers are in sync. Ideally the message sequence numbers should continue from the last message successfully transmitted prior to the termination.



4.4.1 Resetting Sequence Numbers: Starting a new FIX session

4.4.1.1 RESET INITIATED BY THE CLIENT

If the client requires both parties to initialize (i.e. reset to 1) sequence numbers, it may use the ResetSeqNumFlag (141) field of the Logon message. The server will respond with a Logon with the ResetSeqNumFlag (141) field set to "Y" to confirm the initialization of sequence numbers. In such cases, if the MsgSeqNo (34) of the Logon message is not reset to 1, the server will break the TCP/IP connection after sending a Logout. It will include a SessionStatus (1409) of Logout due to session level failure (101) and an indication of the rejection in the Text (58) field.

A client may also manually inform EuroTLX that it would like the server to initialize its sequence numbers prior to the client's next login attempt.

These features are intended to help a client manage an emergency situation. Initializing sequence numbers on a re-login should not be relied upon as a regular practice.

4.4.1.2 RESET INITIATED BY THE SERVER

The Trading System has been designed with fault tolerance and disaster recovery technology that should ensure that the server retains its incoming and outgoing message sequence numbers for each client in the unlikely event of a process or site outage.

However, in case the sequence numbers needs to be reset, clients are required to support a manual request by EuroTLX to initialize sequence numbers prior to the next login attempt.

5 RECOVERY

5.1 Resend Requests

The client may use the **Resend Request** message to recover any lost messages. As outlined in the FIX protocol, this message may be used in one of three modes:

- (i) To request a single message. The BeginSeqNo (7) and EndSeqNo (16) should be the same.
- (ii) To request a specific range of messages. The BeginSeqNo (7) should be the first message of the range and the EndSeqNo (16) should be the last of the range.
- (iii) To request all messages after a particular message. The BeginSeqNo (7) should be the sequence number immediately after that of the last processed message and the EndSeqNo (16) should be zero (0).

5.2 Possible duplicates

The server handles possible duplicates according to the FIX protocol. The client and server will use the PossDupFlag (43) field to indicate that a message may have been previously transmitted with the same MsgSeqNum (34).

5.3 Possible resends

The server may, in the circumstances outlined in **Sections 5.4**, use the PossResend (97) field to indicate that a **Trade Capture Report** may have already been sent under a different MsgSeqNum (34). The client should validate the TradeReportID (571) of such a message against that of previous Trade Capture Reports received from the server during the current trading day.

If a Trade Capture Report with the same TradeReportID (571) had been processed, the resent Trade Capture Report should be ignored. If the same TradeReportID (571) had not been processed, the message should be processed.

The server does not handle possible resends for client-initiated messages and ignores the value in the PossResend (97) field of such messages.

5.4 Transmission of missed messages

The Trade Capture Reports generated during a period when a client is disconnected from the server will be sent to the client when it next reconnects. In the unlikely event the disconnection was due to an outage of the server, all such messages will include a PossResend (97) of "Y".

5.4.1 Application sequencing and recovery

The server supports the application sequencing and recovery features introduced in Service Pack 2 for FIX 5.0. A client may use the Application Message Request to recover missed trades in scenarios such as the following:

- (i) Trades are missed due to a late connection or disconnection during the day.
- (ii) Session level recovery via a **Resend Request** is unavailable due to a sequence number reset initiated by the client or server.
- (iii) All or some of the trades transmitted by the server during the current day are lost due to a failure at the client site.

5.4.1.1 APPLICATION SEQUENCING BY SERVER

The matching system consists of a series of parallel partitions each of which provide the matching service for an exclusive set of securities.

Each Trade Capture Report transmitted by the server will include the identity of the matching partition that generated the trade and the partition's internal sequence number for the trade in the fields ApplID (1180) and ApplSeqNum (1181) respectively. As the matching partitions operate in parallel and employ the same application sequencing scheme, an ApplSeqNum (1181) is only unique per ApplID (1180). The ApplSeqNum of each ApplID will be initialized to "1" at the start of each trading day.

As a client will only receive a subset of the trades executed by each matching partition, the field ApplLastSeqNum (1350) is also included in each Trade Capture Report. This field will contain the ApplSeqNum of the last Trade Capture Report generated for client. This will enable clients to distinguish deliberate sequence gaps from application errors by comparing the value of ApplLastSeqNum (1350) to the ApplSeqNum (1181) of the last received Trade Capture Report from the same ApplID (1180). The ApplLastSeqNum (1350) field is not included in Trade Capture Reports sent in response to a Trade Capture Report Request.

EuroTLX may change the number of partitions and the securities each serves with due notice to clients.

5.4.1.2 DETECTING AN APPLICATION SEQUENCE GAP

A client can detect a dropped message by comparing the ApplLastSeqNum (1350) of each new Trade Capture Report against the ApplSeqNum (1181) of the last trade received from the same ApplID (1180).

In the case of a reconnection, the client can either wait for the next Trade Capture Report to determine whether trades have been missed or issue a request for the most current ApplSeqNum for each ApplID.

Requesting the Latest ApplSeqNum

The client may use the Application Message Request to request the latest ApplSeqNum for one or more ApplIDs. The ApplReqType (1347) of the message should be Request for Last ApplLastSeqNum (2).

Response to Request for Latest ApplSeqNum

The server will respond to the Application Message Request with an **Application Message Request Ack**. If the request was unsuccessful for a particular ApplID, the reason will be specified in the field ApplResponseError (1354). In the case of a successful request, the ApplSeqNum of the last trade generated for the client by each ApplID will be specified in the field RefApplLastSeqNum (1357).

5.4.1.3 REQUESTING RETRANSMISSION OF MISSED TRADES

The client may use the Application Message Request to recover any lost trades. The ApplReqType (1347) of the message should be Retransmission of Application Messages (0). The message may be used in one of four modes:

- (i) To request a single trade. The ApplBegSeqNum (1182) and ApplEndSeqNum (1183) should be the same.
- (ii) To request a specific range of trades. The ApplBegSeqNum (1182) should be the first trade of the range and the ApplEndSeqNum (1183) should be the last of the range.
- (iii) To request all trades after a particular trade. The ApplBegSeqNum (1182) should be the application sequence number immediately after that of the last processed trade and the ApplEndSeqNum (1183) should be zero (0).
- (iv) To request all trades for the day. The ApplBegSeqNum (1182) should be one (1) and the ApplEndSeqNum (1183) should be zero (0).

In all cases, the client should identify the matching partition to which the request relates via the field RefApplID (1355).

5.4.1.4 RESPONSE TO A TRADE RETRANSMISSION REQUEST

The server will respond to the Application Message Request with an Application Message Request Ack to indicate whether the retransmission request is successful or not. If the request was unsuccessful for a particular ApplID, the reason will be specified in the field ApplResponseError (1354).

In the case of a successful retransmission request, the server will resend the requested Trade Capture Reports and Trade Capture Report Ack immediately after the Application Message Request Ack. Each Trade Capture Report and Trade Capture Report Ack will include an ApplResendFlag (1352) of "Y" to indicate that it is resent in response to an

Application Message Request. The resent messages will not include the field ApplLastSeqNum (1350).

5.4.1.5 DISCONNECTION PRIOR TO COMPLETION OF RETRANSMISSION

If the FIX connection is terminated prior to the completion of the Trade Capture Report retransmission, the client should submit a new Application Message Request once it reconnects to the server.

6 SUPPORTED MESSAGE TYPES

This section lists all administrative and application message types supported by the server. Any message not included in this section will be ignored by the server.

6.1 Administrative Messages

All administrative messages may be initiated by either the client or the server.

Message	MsgType	Usage
Heartbeat	0	Allows the client and server to exercise the communication line during periods of inactivity and verify that the interfaces at each end are available.
Logon	A	Allows the client and server to establish a FIX session.
Test Request	1	Allows the client or server to request a response from the other party if inactivity is detected.
Resend Request	2	Allows for the recovery of messages lost during a malfunction of the communications layers.
Reject	3	Used to reject a message that does not comply with FIXT.
Sequence Reset	4	Allows the client or server to increase the expected incoming sequence number of the other party.
Logout	5	Allows the client and server to terminate a FIX session.

6.2 Application Messages Trade Feed

6.2.1 Trade Feed Client-Initiated

Message	MsgType	Usage (on book trade)
Trade Capture Report Request	AD	Allows the client to query/request for a set of Trade Capture Reports from the server

Application Message Request	BW	Allows a real-time client to request one of the following: (i) Retransmission of missed trades (ii) Latest ApplSeqNum of each ApplID
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6.2.2 Trade Feed Server-Initiated

Message	MsgType	Usage (on book trade)
Trade Capture Report	AE	Indicates one of the following: (i) Trade (ii) Trade cancellation
Trade Capture Report Request Ack	AQ	Indicates whether a request for trade capture reports is successful or not.
Application Message Request Ack	BX	Indicates whether a request to retransmit trades or for the latest ApplSeqNum is successful or not.

6.3 Application messages: Other (server initiated)

Message	MsgType	Usage
Business Message Reject	J	(i) Indicates that an application message sent by the client could not be processed.

6.4 Variations from the FIX Protocol

The server conforms to the FIX protocol except as follows:

- The TradeRequestResult (749) field of the Trade Capture Report Request Ack includes custom values.
- The Trade Capture Report Request includes the field MatchType (574).

7 MESSAGE FORMATS

This section provides details on the header and trailer, the seven administrative messages and seven application messages utilized by the post trade gateway. Client-initiated messages not included in this section are rejected by the server via a Reject or Business Message Reject. All fields are encoded in using printable ASCII.

Customers have to ensure that all "string" fields, for client-initiated messages, contain only ASCII characters from 32 to 126 Decimals included.

7.1 Message header and trailer

7.1.1 Message Header

Tag	Field Name	Req	Description
8	BeginString	Y	FIXT.1.1
9	BodyLength	Y	Number of characters after this field up to and including the delimiter immediately preceding the CheckSum.

35	MsgType	Y	The message type.	
			Value	Meaning
			0	Heartbeat
			1	Test Request
			2	Resend Request
			3	Reject
			4	Sequence Reset
			5	Logout
			A	Logon
			AD	Trade Capture Report Request
			AE	Trade Capture Report
			AQ	Trade Capture Report Request Ack
			AR	Trade Capture Report Ack
			BW	Application Message Request
BX	Application Message Request Ack			
j	Business Message Reject			
49	SenderCompID	Y	CompID of the party sending the message.	
56	TargetCompID	Y	CompID of the party the message is sent to.	
34	MsgSeqNum	Y	The sequence number of the message.	
43	PossDupFlag	N	Whether the message was previously transmitted under the same MsgSeqNum (34). Absence of this field is interpreted as Original Transmission (N).	
			Value	Meaning
			Y	Possible Duplicate
			N	Original Transmission

97	PossResend	N	<p>Whether the message was previously transmitted under a different MsgSeqNum (34). Absence of this field is interpreted as Original Transmission (N).</p> <table border="1"> <thead> <tr> <th>Value</th> <th>Meaning</th> </tr> </thead> <tbody> <tr> <td>Y</td> <td>Possible Resend</td> </tr> <tr> <td>N</td> <td>Original Transmission</td> </tr> </tbody> </table>	Value	Meaning	Y	Possible Resend	N	Original Transmission
Value	Meaning								
Y	Possible Resend								
N	Original Transmission								
52	SendingTime	N	Time the message was transmitted. Not required for incoming messages sent by the clients (even if sent by a client, no validation will be done). Required for outgoing messages sent by the server.						
115	OnBehalfOfCompID	N	The ID of the party which the message is on behalf of; will only be used in client initiated messages.						
128	DeliverToCompID	N	<p>The value specified in the OnBehalfOfCompID(115) field will be stamped; will only be used in server initiated ACK messages, Reject messages for client application messages and Business Message Rejects.</p> <p>Note: If messages are re-sent in response to an Application Message Request or Resend Request this field will contain the original value and will not be overwritten. The field will be empty if a value was not present in the originally transmitted message in this instance.</p>						
122	OrigSendingTime	N	Time the message was originally transmitted. If the original time is not available, this should be the same value as SendingTime (52). Required if PossDupFlag (43) is Possible Duplicate (Y).						
1128	AppVerID	N	<p>Version of FIX used in the message. Required if the message is generated by the server.</p> <table border="1"> <thead> <tr> <th>Value</th> <th>Meaning</th> </tr> </thead> <tbody> <tr> <td>9</td> <td>FIX50SP2</td> </tr> </tbody> </table>	Value	Meaning	9	FIX50SP2		
Value	Meaning								
9	FIX50SP2								

7.1.2 Message Trailer

Tag	Field Name	Req	Description
10	Checksum	Y	The checksum of the message.

7.2 Administrative messages

7.2.1 Logon

Tag	Field Name	Req	Description	
Standard Header				
35	MsgType	Y	A = Logon	
Message Body				
98	EncryptMethod	Y	The method of encryption.	
			Value	Meaning
			0	None
108	HeartBtInt	Y	Indicates the heartbeat interval in seconds.	
141	ResetSeqNum Flag	N	Indicates whether the client and server should reset sequence numbers. Absence of this field is interpreted as Do Not Reset Sequence Numbers (N).	
			Value	Meaning
			Y	Reset Sequence Numbers
			N	Do Not Reset Sequence Numbers
554	Password	N	The password assigned to the CompID. Required if the message is generated by the client. Maximum password length is 20 characters.	
925	NewPassword	N	The new password for the CompID. Maximum password length is 20 characters.	
1409	SessionStatus	N	Status of the FIX session or the request to change the password. Required if the message is generated by the server.	
			Value	Meaning
			0	Session Active
			2	Password Due to Expire
3	New session password does not comply with policy			

1137	DefaultAppVerID	Y	Default version of FIX messages used in this session.	
			Value	Meaning
			9	FIX50SP2
Standard Trailer				

7.2.2 Logout

Tag	Field Name	Req	Description	
Standard Header				
35	MsgType	Y	5 = Logout	
Message Body				
1409	SessionStatus	N	Status of the FIX session. Required if the message is generated by the server.	
			Value	Meaning
			3	New session password does not comply with policy
			4	Session logout complete
			6	Account locked
			7	Logons are not allowed at this time
			8	Password expired
			100	Other
			101	Logout due to session level failure
			102	Logout by EuroTLX
104	Application not available			
58	Text	N	The field will contain the next expected sequence number if the server terminated the connection after receiving a sequence number that was less than what was expected. In other cases the field will contain the reason for the logout.	
Standard Trailer				

7.2.3 Heartbeat

Tag	Field Name	Req	Description
Standard Header			
35	MsgType	Y	0 = Heartbeat
Message Body			
112	TestReqID	N	Required if the heartbeat is a response to a Test Request. The value in this field should echo the TestReqID (112) received in the Test Request.
Standard Trailer			

7.2.4 Test Request

Tag	Field Name	Req	Description
Standard Header			
35	MsgType	Y	1 = Test Request
Message Body			
112	TestReqID	Y	Identifier for the request.
Standard Trailer			

7.2.5 Resend Request

Tag	Field Name	Req	Description
Standard Header			
35	MsgType	Y	2 = Resend Request
Message Body			
7	BeginSeqNo	Y	Sequence number of first message in range.
16	EndSeqNo	Y	Sequence number of last message in range.
Standard Trailer			

7.2.6 Reject

Tag	Field Name	Req	Description
Standard Header			
35	MsgType	Y	3 = Reject
Message Body			
45	RefSeqNum	Y	MsgSeqNum (34) of the rejected message.
371	RefTagID	N	If a message is rejected due to an issue with a particular field its tag number will be indicated.
372	RefMsgType	N	MsgType (35) of the rejected message.

373	SessionReject Reason	N	Code specifying the reason for the reject	
			Session Reject Reason	Meaning
			1	Required tag missing
			2	Tag not defined for this message type
			4	Tag specified without a value
			5	Value is incorrect (out of range) for this tag
			6	Incorrect data format for value
			9	CompID problem
			10	SendingTime accuracy problem
			11	Invalid MsgType
			13	Tag appears more than once
			14	Tag specified out of required order
			15	Repeating group fields out of order
			16	Incorrect NumInGroup count for repeating group
18	Invalid or unsupported application version			
99	Other			

58	Text	N	Text specifying the SessionRejectReason(373)
Standard Trailer			

7.2.7 Sequence Reset

Tag	Field Name	Req	Description						
Standard Header									
35	MsgType	Y	4 = Sequence Reset						
Message Body									
36	NewSeqNo	Y	Sequence number of the next message to be transmitted.						
123	GapFillFlag	N	The mode in which the message is being used. Absence of this field is interpreted as Sequence Reset (N). <table border="1" data-bbox="614 846 1189 1008"> <thead> <tr> <th>Value</th> <th>Meaning</th> </tr> </thead> <tbody> <tr> <td>Y</td> <td>Gap Fill</td> </tr> <tr> <td>N</td> <td>Sequence Reset</td> </tr> </tbody> </table>	Value	Meaning	Y	Gap Fill	N	Sequence Reset
Value	Meaning								
Y	Gap Fill								
N	Sequence Reset								
Standard Trailer									

7.3 Application messages: Trade Feed

7.3.1 Trade Capture Report Request (Client Initiated)

Tag	Field Name	Req	Description								
Standard Header											
35	MsgType	Y	AD = Trade Capture Report Request								
Message Body											
568	TradeRequestID	Y	Client specified unique identifier of the request.								
569	TradeRequestType	Y	Type of request. <table border="1"> <thead> <tr> <th>Value</th> <th>Meaning</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>All Trades</td> </tr> <tr> <td>1</td> <td>Trades Matching Specified Criteria</td> </tr> </tbody> </table> <p>If none of the criteria below are specified, this will return all trades for the particular participant.</p>	Value	Meaning	0	All Trades	1	Trades Matching Specified Criteria		
Value	Meaning										
0	All Trades										
1	Trades Matching Specified Criteria										
150	ExecType	N	Type of trade report requested. <table border="1"> <thead> <tr> <th>Value</th> <th>Meaning</th> </tr> </thead> <tbody> <tr> <td>F</td> <td>Trade</td> </tr> <tr> <td>H</td> <td>Trade Cancel</td> </tr> <tr> <td>G</td> <td>Trade Correct</td> </tr> </tbody> </table>	Value	Meaning	F	Trade	H	Trade Cancel	G	Trade Correct
Value	Meaning										
F	Trade										
H	Trade Cancel										
G	Trade Correct										
574	MatchType	N	Point in matching process trade was matched. <table border="1"> <thead> <tr> <th>Value</th> <th>Meaning</th> </tr> </thead> <tbody> <tr> <td>4</td> <td>Continuous Trading</td> </tr> <tr> <td>22</td> <td>RFQ Trades</td> </tr> </tbody> </table>	Value	Meaning	4	Continuous Trading	22	RFQ Trades		
Value	Meaning										
4	Continuous Trading										
22	RFQ Trades										

828	TrdType		N		
				Value	Meaning
				0	All Regular Trades
				99	RFQ Trades
				30	Not Used by EuroTLX
48	SecurityID		N	Unique Instrument ID assigned to the instrument in the Millennium Exchange.	
22	SecurityIDSource		N	Required if SecurityID (48) is specified. Will only be validated if 'SecurityID' is specified.	
				Value	Meaning
				8	Exchange Symbol
454	NoSecurityAltID		N	If present, value in this field should always be "1".	
➔	455	SecurityAltID	N	Identification number of the instrument.	
➔	456	SecurityAltID Source	N	Type of instrument identification used. Required if SecurityAltID (455) is specified.	
				Value	Meaning
				4	ISIN
167	SecurityType		N	Indicates the instrument type.	
1227	ProductComplex		N	Indicates the segment.	
711	NoUnderlyings		N	Number of underlyings. If present, the value in this field should always be "1". If multiple underlyings are specified, only the last repeating block will be considered.	
➔	311	Underlying Symbol	N	InstrumentID of the underlying instrument. Required if NoUnderlyings (711) is specified.	
106	Issuer		N	Issuer of the instrument.	
54	Side		N	Side of the executed order.	
				Value	Meaning
				1	Buy
				2	Sell

11	ClOrdID	N	Identifier of the executed order as specified by the entering firm.													
37	OrderID	N	Identifier of the executed order as specified by matching system.													
453	NoPartyIDs	N	Number of party identifiers. Required with respect to the no of party roles specified.													
➔	448	PartyID	N	Identifier of the party.												
➔	447	PartyIDSource	N	<table border="1"> <thead> <tr> <th>Value</th> <th>Meaning</th> </tr> </thead> <tbody> <tr> <td>D</td> <td>Proprietary/Custom Code</td> </tr> </tbody> </table>	Value	Meaning	D	Proprietary/Custom Code								
Value	Meaning															
D	Proprietary/Custom Code															
➔	452	PartyRole	N	<table border="1"> <thead> <tr> <th>Value</th> <th>Meaning</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Executing Firm</td> </tr> <tr> <td>100</td> <td>Trader ID</td> </tr> <tr> <td>17</td> <td>Counterparty Firm</td> </tr> <tr> <td>76</td> <td>Trader Group</td> </tr> <tr> <td>24</td> <td>Clearing Organisation</td> </tr> </tbody> </table>	Value	Meaning	1	Executing Firm	100	Trader ID	17	Counterparty Firm	76	Trader Group	24	Clearing Organisation
Value	Meaning															
1	Executing Firm															
100	Trader ID															
17	Counterparty Firm															
76	Trader Group															
24	Clearing Organisation															
1	Account	N	Client reference for the trade.													
Standard Trailer																

7.3.2 Application Message Request (Client Initiated)

Tag	Field Name	Req	Description						
Standard Header									
35	MsgType	Y	BW = Application Message Request						
Message Body									
1346	ApplReqID	Y	Client specified unique identifier of the request.						
1347	ApplReqType	Y	Type of request. <table border="1"> <thead> <tr> <th>Value</th> <th>Meaning</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>Retransmission of Application Messages</td> </tr> <tr> <td>2</td> <td>Request for Last ApplSeqNum</td> </tr> </tbody> </table>	Value	Meaning	0	Retransmission of Application Messages	2	Request for Last ApplSeqNum
Value	Meaning								
0	Retransmission of Application Messages								
2	Request for Last ApplSeqNum								
1351	NoApplIDs	Y	Number of ApplIDs to which the request relates.						
➔	1355	RefApplID	Y	Identifier of the partition.					
➔	1182	ApplBeg SeqNum	N	Application sequence number of first message in range to be resent. Required if ApplReqType (1347) is Retransmission of Application Messages (0).					
➔	1183	ApplEnd SeqNum	N	Application sequence number of last message in range to be resent. Required if ApplReqType (1347) is Retransmission of Application Messages (0).					
Standard Trailer									

7.3.3 Trade Capture Report (Server Initiated)

Tag	Field Name	Req	Description
Standard Header			
35	MsgType	Y	AE = Trade Capture Report

Message Body									
1180	ApplID	Y	Identifier of the partition.						
1181	ApplSeqNum	Y	Partition's sequence number for trade.						
1350	ApplLastSeqNum	N	<p>ApplSeqNum of last trade generated for client. Required if ApplResendFlag (1352) is "N" and TradeRequestID (568) is not present.</p> <p>Tag 1350 will not be populated on the first TCR sent to the client (since zero is not a valid value).</p>						
1352	ApplResendFlag	N	<p>Whether the message is sent in response to an Application Message Request. Absence of this field is interpreted as Original Transmission (N).</p> <table border="1"> <thead> <tr> <th>Value</th> <th>Meaning</th> </tr> </thead> <tbody> <tr> <td>Y</td> <td>Response to Application Message Request</td> </tr> <tr> <td>N</td> <td>Original Transmission</td> </tr> </tbody> </table>	Value	Meaning	Y	Response to Application Message Request	N	Original Transmission
Value	Meaning								
Y	Response to Application Message Request								
N	Original Transmission								
568	TradeRequestID	N	Identifier of the Trade Capture Report Request the message is sent in response to.						
912	LastRptRequested	N	<p>Indicates the last message sent in response to a Trade Capture Report Request.</p> <table border="1"> <thead> <tr> <th>Value</th> <th>Meaning</th> </tr> </thead> <tbody> <tr> <td>Y</td> <td>Last Message</td> </tr> </tbody> </table>	Value	Meaning	Y	Last Message		
Value	Meaning								
Y	Last Message								
571	TradeReportID	Y	Identifier of the message.						
1003	TradeID	Y	Identifier of the trade. Trade ID will be a 62 base encoded value in ASCII format						
820	TradeLinkID	Y	Identifier of the transaction in which the trade was executed.						
572	TradeReportRefID	N	<p>Reference to trade being cancelled.</p> <p>Required if TradeReportTrans Type (487) is Cancel (1).</p> <p>Required if ExecType (150) is Trade Cancel (H) or Trade Correct (G).</p>						
1123	TradeHandlingInstr	Y	<p>Handling instructions to client.</p> <table border="1"> <thead> <tr> <th>Value</th> <th>Meaning</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>Trade Confirmation</td> </tr> </tbody> </table>	Value	Meaning	0	Trade Confirmation		
Value	Meaning								
0	Trade Confirmation								

856	TradeReportType	Y	<p>Type of trade report.</p> <table border="1" data-bbox="826 277 1398 584"> <thead> <tr> <th data-bbox="826 277 935 367">Value</th> <th data-bbox="938 277 1398 367">Meaning</th> </tr> </thead> <tbody> <tr> <td data-bbox="826 371 935 421">0</td> <td data-bbox="938 371 1398 421">Submit</td> </tr> <tr> <td data-bbox="826 425 935 474">6</td> <td data-bbox="938 425 1398 474">Trade Report Cancel</td> </tr> <tr> <td data-bbox="826 479 935 528">7</td> <td data-bbox="938 479 1398 528">Trade Break</td> </tr> <tr> <td data-bbox="826 533 935 584">5</td> <td data-bbox="938 533 1398 584">Not Used by ETLX</td> </tr> </tbody> </table>	Value	Meaning	0	Submit	6	Trade Report Cancel	7	Trade Break	5	Not Used by ETLX		
Value	Meaning														
0	Submit														
6	Trade Report Cancel														
7	Trade Break														
5	Not Used by ETLX														
150	ExecType	Y	<p>Type of execution being reported. This field is mandatory for any on book trade published by the system.</p> <table border="1" data-bbox="826 723 1398 976"> <thead> <tr> <th data-bbox="826 723 935 813">Value</th> <th data-bbox="938 723 1398 813">Meaning</th> </tr> </thead> <tbody> <tr> <td data-bbox="826 817 935 866">F</td> <td data-bbox="938 817 1398 866">Trade</td> </tr> <tr> <td data-bbox="826 871 935 920">H</td> <td data-bbox="938 871 1398 920">Trade Cancel</td> </tr> <tr> <td data-bbox="826 925 935 976">G</td> <td data-bbox="938 925 1398 976">Trade Correct</td> </tr> </tbody> </table>	Value	Meaning	F	Trade	H	Trade Cancel	G	Trade Correct				
Value	Meaning														
F	Trade														
H	Trade Cancel														
G	Trade Correct														
20110	Clearing Type	Y	<p>Defines whether the particular instrument is cleared or not.</p> <table border="1" data-bbox="826 1070 1398 1234"> <thead> <tr> <th data-bbox="826 1070 935 1126">Value</th> <th data-bbox="938 1070 1398 1126">Meaning</th> </tr> </thead> <tbody> <tr> <td data-bbox="826 1131 935 1180">0</td> <td data-bbox="938 1131 1398 1180">Not Cleared</td> </tr> <tr> <td data-bbox="826 1184 935 1234">1</td> <td data-bbox="938 1184 1398 1234">Cleared</td> </tr> </tbody> </table>	Value	Meaning	0	Not Cleared	1	Cleared						
Value	Meaning														
0	Not Cleared														
1	Cleared														
20111	Novated Indicator	Y	<p>Defines whether the trade needs to be sent to clearing system.</p> <table border="1" data-bbox="826 1317 1398 1480"> <thead> <tr> <th data-bbox="826 1317 935 1373">Value</th> <th data-bbox="938 1317 1398 1373">Meaning</th> </tr> </thead> <tbody> <tr> <td data-bbox="826 1377 935 1426">0</td> <td data-bbox="938 1377 1398 1426">No</td> </tr> <tr> <td data-bbox="826 1431 935 1480">1</td> <td data-bbox="938 1431 1398 1480">Yes</td> </tr> </tbody> </table>	Value	Meaning	0	No	1	Yes						
Value	Meaning														
0	No														
1	Yes														
487	TradeReportTrans Type	Y	<p>Type of transaction being reported.</p> <table border="1" data-bbox="826 1552 1398 1895"> <thead> <tr> <th data-bbox="826 1552 935 1608">Value</th> <th data-bbox="938 1552 1398 1608">Meaning</th> </tr> </thead> <tbody> <tr> <td data-bbox="826 1612 935 1662">0</td> <td data-bbox="938 1612 1398 1662">New</td> </tr> <tr> <td data-bbox="826 1666 935 1715">1</td> <td data-bbox="938 1666 1398 1715">Cancel</td> </tr> <tr> <td data-bbox="826 1720 935 1769">2</td> <td data-bbox="938 1720 1398 1769">Replace</td> </tr> <tr> <td data-bbox="826 1774 935 1823">3</td> <td data-bbox="938 1774 1398 1823">Release</td> </tr> <tr> <td data-bbox="826 1827 935 1895">4</td> <td data-bbox="938 1827 1398 1895">Publish</td> </tr> </tbody> </table>	Value	Meaning	0	New	1	Cancel	2	Replace	3	Release	4	Publish
Value	Meaning														
0	New														
1	Cancel														
2	Replace														
3	Release														
4	Publish														

573	MatchStatus	Y	Status of the trade. <table border="1"> <thead> <tr> <th>Value</th> <th>Meaning</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>Matched</td> </tr> <tr> <td>1</td> <td>Unmatched</td> </tr> <tr> <td>2</td> <td>Advisory/Error</td> </tr> </tbody> </table>	Value	Meaning	0	Matched	1	Unmatched	2	Advisory/Error
Value	Meaning										
0	Matched										
1	Unmatched										
2	Advisory/Error										
828	TrdType	N	Type of trade. <table border="1"> <thead> <tr> <th>Value</th> <th>Meaning</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>Regular Trade</td> </tr> <tr> <td>99</td> <td>RFQ Trades</td> </tr> </tbody> </table>	Value	Meaning	0	Regular Trade	99	RFQ Trades		
Value	Meaning										
0	Regular Trade										
99	RFQ Trades										
60	TransactTime	Y	Time trade or cancellation occurred.								
32	LastQty	Y	Traded quantity.								
423	PriceType	N	Quotation format for instrument. Absence of this field should be interpreted as Price Per Unit (2). <table border="1"> <thead> <tr> <th>Value</th> <th>Meaning</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Percent of Par</td> </tr> <tr> <td>2</td> <td>Price Per Unit</td> </tr> <tr> <td>9</td> <td>Yield</td> </tr> </tbody> </table>	Value	Meaning	1	Percent of Par	2	Price Per Unit	9	Yield
Value	Meaning										
1	Percent of Par										
2	Price Per Unit										
9	Yield										
31	LastPx	Y	Traded price.								
669	LastParPx	N	Traded price expressed in percent-of-par.								
236	Yield	N	Implied yield of this trade. This is a percentage field (e.g. 0.05 represents 5%).								
64	SettlDate	N	Date on which the trade will settle.								
574	MatchType	Y	Point in matching process trade was matched. <table border="1"> <thead> <tr> <th>Value</th> <th>Meaning</th> </tr> </thead> <tbody> <tr> <td>4</td> <td>Continuous Trading</td> </tr> <tr> <td>22</td> <td>RFQ Trades</td> </tr> </tbody> </table>	Value	Meaning	4	Continuous Trading	22	RFQ Trades		
Value	Meaning										
4	Continuous Trading										
22	RFQ Trades										
48	SecurityID	Y	Unique Instrument ID assigned to the instrument in the Millennium Exchange.								
22	SecurityIDSource	Y	<table border="1"> <thead> <tr> <th>Value</th> <th>Meaning</th> </tr> </thead> <tbody> <tr> <td>8</td> <td>Exchange Symbol</td> </tr> </tbody> </table>	Value	Meaning	8	Exchange Symbol				
Value	Meaning										
8	Exchange Symbol										

454	NoSecurityAltID		N	If present, value in this field will always be "1".						
➔	455	SecurityAltID	N	Identification number of the instrument.						
➔	456	SecurityAltID Source	N	Type of instrument identification used. Required if SecurityAltID (455) is specified. <table border="1" data-bbox="826 461 1390 568"> <thead> <tr> <th>Value</th> <th>Meaning</th> </tr> </thead> <tbody> <tr> <td>4</td> <td>ISIN</td> </tr> </tbody> </table>	Value	Meaning	4	ISIN		
Value	Meaning									
4	ISIN									
167	SecurityType		N	Indicates the instrument type.						
1227	ProductComplex		N	Segment the instrument belongs to.						
541	MaturityDate		N	Date an instrument expires. Required for fixed income instruments.						
711	NoUnderlyings		N	Number of underlyings for the instrument. If present, the value in this field will always be "1".						
➔	311	Underlying Symbol	N	InstrumentID of the underlying instrument. Required if NoUnderlyings (711) is specified.						
106	Issuer		N	Issuer of the instrument. Required for fixed income instruments.						
225	IssueDate		N	Date on which the instrument was issued. For fixed income instruments the value is required and will always be equal to a default value.						
27016	ContraCapacity		N	Capacity of the contra order that is involved in the trade.						
552	NoSides		Y	Number of sides which will always be "1".						
➔	54	Side	Y	Side of the executed order. <table border="1" data-bbox="826 1451 1390 1615"> <thead> <tr> <th>Value</th> <th>Meaning</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Buy</td> </tr> <tr> <td>2</td> <td>Sell</td> </tr> </tbody> </table>	Value	Meaning	1	Buy	2	Sell
Value	Meaning									
1	Buy									
2	Sell									
➔	1427	SideExecID	N	Identifier of the execution received by the order. Required only for messages sent by the server if TrdType (828) is Regular Trade (0).						
➔	453	NoPartyIDs	Y	Number of party identifiers.						

→	→	448	PartyID	Y	<p>Identifier of the party.</p> <p>If two PartyID's are specified with the same PartRole(452) the Last PartyID will be considered as the correct PartyID.</p> <p>If an on book trade is cleared, the Counterparty Firm (17) will be populated with the CCP.</p> <p>If an on book trade is cleared, the Clearing Organization (24) will be populated with the Clearing Member.</p> <p>If an on book trade is not cleared, the Counterparty Firm (17) will be populated with the Contra Party Firm ID.</p> <p>Other than the above values this could contain a value stated below or a code/identifier (i.e. 4 - 4294967295) provided by the user when Client ID (3) Investment Decision Maker (122) and Executing Trader (12) is set for the Party Role (452) field during an on book trade. Note that;</p> <p>Value '0' will be considered 'None' only when the Party Role (452) is set to '3' or '122' and will be rejected when Party Role (452) is set to '12'.</p> <p>Value '1' and '2' will be considered as AGGR and PNAL only when the Party Role is set to '3' and will be rejected when the Party Role (452) is set to '12' and '122'.</p> <p>Value '3' will be considered 'CLIENT' only when the Party Role (452) is set to '12' and will be rejected when Party Role is set to '3' and '122'.</p> <table border="1" data-bbox="823 1727 1441 2190"> <thead> <tr> <th data-bbox="823 1727 1078 1823">Value</th> <th data-bbox="1078 1727 1441 1823">Meaning</th> </tr> </thead> <tbody> <tr> <td data-bbox="823 1823 1078 1919">0</td> <td data-bbox="1078 1823 1441 1919">None</td> </tr> <tr> <td data-bbox="823 1919 1078 2013">1</td> <td data-bbox="1078 1919 1441 2013">AGGR</td> </tr> <tr> <td data-bbox="823 2013 1078 2107">2</td> <td data-bbox="1078 2013 1441 2107">PNAL</td> </tr> <tr> <td data-bbox="823 2107 1078 2190">3⁵⁹</td> <td data-bbox="1078 2107 1441 2190">CLIENT</td> </tr> </tbody> </table>	Value	Meaning	0	None	1	AGGR	2	PNAL	3 ⁵⁹	CLIENT
Value	Meaning														
0	None														
1	AGGR														
2	PNAL														
3 ⁵⁹	CLIENT														

➔	➔	447	Part yID Source	Y	<p>Required if PartyID (448) is specified. It is expected that the user will set value 'P' for PartyID Source (447), when values 3, 122 or 12 is specified in Party Role (452).</p> <table border="1"> <thead> <tr> <th>Value</th> <th>Meaning</th> </tr> </thead> <tbody> <tr> <td>D</td> <td>Proprietary/Custom Code</td> </tr> <tr> <td>P</td> <td>Short Code</td> </tr> </tbody> </table>	Value	Meaning	D	Proprietary/Custom Code	P	Short Code														
Value	Meaning																								
D	Proprietary/Custom Code																								
P	Short Code																								
➔	➔	452	Part y Role	Y	<p>Role of the specified PartyID (448). In all messages published by the server Executing Firm(1), Counterparty Firm(17) and Trader Group(76) will be populated. If the particular order was specified with a Trader ID(100) at order entry, then that information will also be published in the TCR.</p> <table border="1"> <thead> <tr> <th>Value</th> <th>Meaning</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Executing Firm</td> </tr> <tr> <td>7</td> <td>Reserved</td> </tr> <tr> <td>17</td> <td>Contra Firm</td> </tr> <tr> <td>100</td> <td>Trader ID</td> </tr> <tr> <td>76</td> <td>Trader Group</td> </tr> <tr> <td>24</td> <td>Clearing Organization</td> </tr> <tr> <td>3</td> <td>Client ID</td> </tr> <tr> <td>122</td> <td>Investment Decision Maker</td> </tr> <tr> <td>12</td> <td>Executing Trader</td> </tr> </tbody> </table>	Value	Meaning	1	Executing Firm	7	Reserved	17	Contra Firm	100	Trader ID	76	Trader Group	24	Clearing Organization	3	Client ID	122	Investment Decision Maker	12	Executing Trader
Value	Meaning																								
1	Executing Firm																								
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3	Client ID																								
122	Investment Decision Maker																								
12	Executing Trader																								
➔	➔	237 6	Part yRol eQu alifie r	N	<p>Provides a further qualification for the value specified in the Party Role (452)</p> <table border="1"> <thead> <tr> <th>Value</th> <th>Meaning</th> </tr> </thead> <tbody> <tr> <td>22</td> <td>Algorithm</td> </tr> <tr> <td>23</td> <td>Firm or Legal Entity</td> </tr> <tr> <td>24</td> <td>Natural Person</td> </tr> </tbody> </table>	Value	Meaning	22	Algorithm	23	Firm or Legal Entity	24	Natural Person												
Value	Meaning																								
22	Algorithm																								
23	Firm or Legal Entity																								
24	Natural Person																								

➔	1115	OrderCategory	Y	Type of interest behind trade. <table border="1"> <thead> <tr> <th>Value</th> <th>Meaning</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Order</td> </tr> <tr> <td>2</td> <td>Quote</td> </tr> <tr> <td>r</td> <td>RFQ Trades</td> </tr> </tbody> </table>	Value	Meaning	1	Order	2	Quote	r	RFQ Trades				
Value	Meaning															
1	Order															
2	Quote															
r	RFQ Trades															
➔	1444	SideLiquidity Ind	N	Whether the order added or removed liquidity. <table border="1"> <thead> <tr> <th>Value</th> <th>Meaning</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Added Liquidity</td> </tr> <tr> <td>2</td> <td>Removed Liquidity</td> </tr> </tbody> </table>	Value	Meaning	1	Added Liquidity	2	Removed Liquidity						
Value	Meaning															
1	Added Liquidity															
2	Removed Liquidity															
➔	37	OrderID	N	Identifier of the executed order as specified by the matching system.												
➔	11	ClOrdID	N	Identifier of the executed order/quote/RFQ as specified by the entering firm.												
➔	528	OrderCapacity	Y	Capacity of the firm that placed the order. <table border="1"> <thead> <tr> <th>Value</th> <th>Meaning</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>Any other trading capacity (AOTC) - Agency</td> </tr> <tr> <td>P</td> <td>Dealing on own account (DEAL) - Principal</td> </tr> <tr> <td>G</td> <td>Dealing on own account (DEAL) - Proprietary</td> </tr> <tr> <td>R</td> <td>Matched Principal (MTCH)</td> </tr> <tr> <td>U</td> <td>Dealing on own account (DEAL) - Unmatched Principal</td> </tr> </tbody> </table>	Value	Meaning	A	Any other trading capacity (AOTC) - Agency	P	Dealing on own account (DEAL) - Principal	G	Dealing on own account (DEAL) - Proprietary	R	Matched Principal (MTCH)	U	Dealing on own account (DEAL) - Unmatched Principal
Value	Meaning															
A	Any other trading capacity (AOTC) - Agency															
P	Dealing on own account (DEAL) - Principal															
G	Dealing on own account (DEAL) - Proprietary															
R	Matched Principal (MTCH)															
U	Dealing on own account (DEAL) - Unmatched Principal															
➔	1	Account	N	Client Reference specified at order entry												
➔	581	Account Type	N	Clearing account type. <table border="1"> <thead> <tr> <th>Value</th> <th>Meaning</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Client</td> </tr> <tr> <td>3</td> <td>House</td> </tr> </tbody> </table>	Value	Meaning	1	Client	3	House						
Value	Meaning															
1	Client															
3	House															

➔	2667	Algorithmic TradeIndicator		N	Whether the order, quote or RFQ was generated via an algorithm.				
					<table border="1"> <thead> <tr> <th>Value</th> <th>Meaning</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>True</td> </tr> </tbody> </table>	Value	Meaning	1	True
Value	Meaning								
1	True								
➔	1724	OrderOrigination		N	Whether the order, quote or RFQ was generated via Direct Electronic Access (DEA) or not.				
					<table border="1"> <thead> <tr> <th>Value</th> <th>Meaning</th> </tr> </thead> <tbody> <tr> <td>5</td> <td>DEA</td> </tr> </tbody> </table>	Value	Meaning	5	DEA
Value	Meaning								
5	DEA								
➔	2593	NoOrderAttributes		N	No of Order Attributes				
➔	➔	2594	OrderAttributeType	N	Reserved field.				
					<table border="1"> <thead> <tr> <th>Value</th> <th>Meaning</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>Reserved</td> </tr> </tbody> </table>	Value	Meaning	2	Reserved
Value	Meaning								
2	Reserved								
➔	➔	2595	OrderAttributeValue	N	Will be populated if OrderAttributeType (2594) is specified				
					<table border="1"> <thead> <tr> <th>Value</th> <th>Meaning</th> </tr> </thead> <tbody> <tr> <td>Y</td> <td>Yes</td> </tr> </tbody> </table>	Value	Meaning	Y	Yes
Value	Meaning								
Y	Yes								
2668	NoTrdRegPublications			N	The number of regulatory publication rules in the repeating group. Applicable for on book trades only.				

➔	2669	TrdRegPublicationType	N	<p>Specifies the type of regulatory trade publication.</p> <table border="1"> <thead> <tr> <th>Value</th> <th>Meaning</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>Pre-trade transparency waiver</td> </tr> <tr> <td>1</td> <td>Post-trade deferral</td> </tr> </tbody> </table>	Value	Meaning	0	Pre-trade transparency waiver	1	Post-trade deferral						
Value	Meaning															
0	Pre-trade transparency waiver															
1	Post-trade deferral															
➔	2670	TrdRegPublicationReason	N	<p>Additional reason for trade publication type specified in TrdRegPublicationType(2669).</p> <p>Applicable for on book trades only.</p> <p>Value will be derived by the system based on trade attributes</p> <table border="1"> <thead> <tr> <th>Value</th> <th>Meaning</th> </tr> </thead> <tbody> <tr> <td>4</td> <td>Pre-trade ILQD</td> </tr> <tr> <td>5</td> <td>Pre-trade SIZE</td> </tr> <tr> <td>6</td> <td>Post trade LRGS</td> </tr> <tr> <td>7</td> <td>Post trade ILQD</td> </tr> <tr> <td>8</td> <td>Post trade SIZE</td> </tr> </tbody> </table>	Value	Meaning	4	Pre-trade ILQD	5	Pre-trade SIZE	6	Post trade LRGS	7	Post trade ILQD	8	Post trade SIZE
Value	Meaning															
4	Pre-trade ILQD															
5	Pre-trade SIZE															
6	Post trade LRGS															
7	Post trade ILQD															
8	Post trade SIZE															
1838	NoTradePriceConditions		N	Number of price conditions in repeating group.												
➔	1839	TradePriceCondition	N	<p>Price conditions in effect at the time of the trade.</p> <table border="1"> <thead> <tr> <th>Value</th> <th>Meaning</th> </tr> </thead> <tbody> <tr> <td>17</td> <td>Price pending</td> </tr> </tbody> </table>	Value	Meaning	17	Price pending								
Value	Meaning															
17	Price pending															
1301	MarketID		N	Market posting the trade (MIC value)												

1125	OrigTradeDate	N	<p>The original date and the time of the trade.</p> <p>The value will be equal to the Trading Date and Time. When a trade is cancelled or amended, this field will carry the original time of the trade.</p> <p>The data type will be UTC timestamp</p>										
2700 6	Delay Mode	N	<p>If a trade that is reported today and it is delayed, such that the delayed trade is published at a specified time, then the Intended Publish Time should indicate the date and the intended publish time with the Delay Mode set to Time Based Delay (0).</p> <p>If a trade that is reported today and it is delayed, such that the delayed trade is published on a future date at a specific event (EOD, SOD or NOON), then the Intended Publish Time should indicate the future date (with no time) and the Delay Mode field should contain the event at which the trade is published.</p> <p>If a trade is reported today and it is immediately published, then the Intended Publish Time should indicate the date and the intended publish time with the Delay Mode set to Time Based Delay (0).</p> <table border="1" data-bbox="823 1377 1441 1839"> <thead> <tr> <th data-bbox="823 1377 1007 1471">Value</th> <th data-bbox="1007 1377 1441 1471">Meaning</th> </tr> </thead> <tbody> <tr> <td data-bbox="823 1471 1007 1565">0</td> <td data-bbox="1007 1471 1441 1565">Time Based Delay</td> </tr> <tr> <td data-bbox="823 1565 1007 1659">1</td> <td data-bbox="1007 1565 1441 1659">SOD</td> </tr> <tr> <td data-bbox="823 1659 1007 1753">2</td> <td data-bbox="1007 1659 1441 1753">EOD</td> </tr> <tr> <td data-bbox="823 1753 1007 1839">3</td> <td data-bbox="1007 1753 1441 1839">NOON</td> </tr> </tbody> </table>	Value	Meaning	0	Time Based Delay	1	SOD	2	EOD	3	NOON
Value	Meaning												
0	Time Based Delay												
1	SOD												
2	EOD												
3	NOON												

2700 7	Intended Publish Time	N	<p>The trade publish date and time in UTC format when the delay mode is time based. Applicable for RFQ Trades only.</p> <p>If the delay mode is event based the intended publish time will be in 'YYYYMMDD' format.</p> <p>If the RFQ delay mode is time based, the intended publish time will be in 'YYYYMMDD-HH:MM:SS' format.</p> <p>If RFQ trades are immediately published, a value will not be populated.</p>										
3300 5	DelayPublicationInstruction	N	<p>Denotes the publication status of the RFQ Trade. Only populated for RFQ Trades.</p> <p>Absence of this field is interpreted as 'Immediately Published'.</p> <table border="1" data-bbox="823 1043 1442 1547"> <thead> <tr> <th data-bbox="823 1043 1007 1137">Value</th> <th data-bbox="1010 1043 1442 1137">Meaning</th> </tr> </thead> <tbody> <tr> <td data-bbox="823 1142 1007 1234">1</td> <td data-bbox="1010 1142 1442 1234">Delayed</td> </tr> <tr> <td data-bbox="823 1238 1007 1330">2</td> <td data-bbox="1010 1238 1442 1330">Delayed and Published</td> </tr> <tr> <td data-bbox="823 1335 1007 1426">3</td> <td data-bbox="1010 1335 1442 1426">Pre-released</td> </tr> <tr> <td data-bbox="823 1431 1007 1547">4</td> <td data-bbox="1010 1431 1442 1547">Delayed and Published in advance</td> </tr> </tbody> </table>	Value	Meaning	1	Delayed	2	Delayed and Published	3	Pre-released	4	Delayed and Published in advance
Value	Meaning												
1	Delayed												
2	Delayed and Published												
3	Pre-released												
4	Delayed and Published in advance												

3300 7	ContraOrderBook	N	<p>Identifier of the order book of the contra party of an RFQ execution (i.e. when TrdType = 99 (RFQ Trades)).</p> <p>Absence of this field is interpreted as RFQ Trades book for an RFQ trade (i.e. when TrdType = 99 (RFQ Trades)).</p> <table border="1"> <thead> <tr> <th>Value</th> <th>Meaning</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Regular</td> </tr> </tbody> </table> <p>This field is not applicable to any other trade type.</p>	Value	Meaning	1	Regular
Value	Meaning						
1	Regular						
2702 0	DecimalTVTIC	N	<p>This is the decimal encoding of the TradeMatchID field sent via the execution report</p> <p>Required if ExecType (150) is Trade (F) or Trade Cancel (H) or Trade Correct (G).</p>				
Standard Trailer							

7.3.4 Trade Capture Report Request Ack (Server Initiated)

Tag	Field Name	Req	Description
Standard Header			
35	MsgType	Y	AQ = Trade Capture Report Request Ack
Message Body			
568	TradeRequestID	Y	Identifier of the request being acknowledged
569	TradeRequestType	Y	Value specified in the request

750	TradeRequestStatus	Y	Whether the request is accepted or rejected.	
			Value	Meaning
			0	Accepted
			2	Rejected
749	TradeRequestResult	Y	Reason the request is rejected.	
			Value	Meaning
			0	Successful
			8	TradeRequestType not Supported
			9	Not Authorized
			100	Cannot Match Selection Criteria
			200	Request Limit for Day Reached
748	TotNumTradeReports	N	Number of Trade Capture Reports that will be sent in response to the request. Required if TradeRequestStatus (750) is Accepted (0).	
Standard Trailer				

7.3.5 Application Message Request Ack (Server Initiated)

Tag	Field Name	Req	Description	
Standard Header				
35	MsgType	Y	BX = Application Message Request Ack	
Message Body				
1353	ApplResponseID	Y	Server specified identifier of the acknowledgement.	
1346	ApplReqID	Y	Identifier of the request being acknowledged.	
1347	ApplReqType	Y	Value specified in the request being acknowledged.	
1351	NoApplIDs	Y	Number of ApplIDs to which the request relates.	
➔	1355	RefApplID	Y	Identifier of the partition.
➔	1182	ApplBeg SeqNum	N	Application sequence number of first message in range to be resent. Required if ApplReqType (1347) is Retransmission of Application Messages (0).

➔	1183	ApplEnd SeqNum	N	Application sequence number of last message in range to be resent. Required if ApplReqType (1347) is Retransmission of Application Messages (0).								
➔	1357	RefAppl LastSeq Num	N	ApplSeqNum of the last trade generated for the client. Required if ApplReqType (1347) is Request for Last ApplSeqNum (2) and ApplResponseError (1354) is not specified.								
➔	1354	Appl Response Error	N	Reason request is rejected. <table border="1" data-bbox="783 607 1430 826"> <thead> <tr> <th>Value</th> <th>Meaning</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>ApplID Does Not Exist</td> </tr> <tr> <td>1</td> <td>Requested Trades are Not Available</td> </tr> <tr> <td>2</td> <td>Client Not Authorised</td> </tr> </tbody> </table>	Value	Meaning	0	ApplID Does Not Exist	1	Requested Trades are Not Available	2	Client Not Authorised
Value	Meaning											
0	ApplID Does Not Exist											
1	Requested Trades are Not Available											
2	Client Not Authorised											
58	Text		N	Text specifying the reason for the rejection.								
Standard Trailer												

7.4 Application Messages: Other

7.4.1 Business Message Reject

Tag	Field Name	Req	Description	
Standard Header				
35	MsgType	Y	j = Business Message Reject	
Message Body				
45	RefSeqNum	Y	MsgSeqNum (34) of the rejected message.	
372	RefMsgType	Y	MsgType (35) of the rejected message.	
371	RefTagID	N	If a message is rejected due to an issue with a particular field its tag number will be indicated.	
379	BusinessReject RefID	N	Client specified identifier (e.g. Firm Trade ID) of the rejected message if it is available.	
380	BusinessReject Reason	Y	Code specifying the reason for the reject. Please refer to Section 8.2 for a list of reject codes.	
58	Text		N	Text specifying the reason for the rejection.

8 REJECT CODES

Session Reject Reason	Meaning
1	Required tag missing
2	Tag not defined for this message type
4	Tag specified without a value
5	Value is incorrect (out of range) for this tag
6	Incorrect data format for value
9	CompID problem
11	Invalid MsgType
13	Tag appears more than once
14	Tag specified out of required order
15	Repeating group fields out of order
16	Incorrect NumInGroup count for repeating group
18	Invalid or unsupported application version
99	Other

8.1 Trade Capture Report Ack

Trade Report Reject Reason	Meaning
2	Unknown instrument
101	Capacity / Clearing Account specified for counterparty
7820	Invalid Order Capacity

8.2 Business Message Reject

Business Reject Reason	Meaning
0	Message Rate Exceeded
3	Unsupported message type
4	Application not available
5	Conditionally required field missing

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